TENDER DOCUMENT

PUNJAB AGRICULTURE FOOD AND DRUG AUTHORITY (PAFDA)

SUPPLY, INSTALLATION, COMMISSIONING AND MAINTENANCE OF LABORATORY EQUIPMENT

ELECTROPHORESIS, SPECTROPHOTOMETRY, AND MICROBIAL ANALYSIS EQUIPMENT (LOT-118)





PUNJAB AGRICULTURE, FOOD AND DRUG AUTHORITY

HOME DEPARTMENT

GOVERNMENT OF THE PUNJAB

HEAD OFFICE: PAFDA, THOKAR NIAZ BAIG, MULTAN ROAD, LAHORE.

PAKISTAN

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Contents

INVITATION FOR E-BIDS	3
BID DATA SHEET	5
Instructions to Bidders. (ITB)	6
INTRODUCTION	6
THE BIDDING PROCEDURE	6
THE BIDDING DOCUMENTS	7
PREPARATION OF BIDS	8
OPENING AND EVALUATION OF BIDS	12
Opening of Bids:	12
Eligibility Criteria:	12
Qualification Criteria:	13
EVALUATION CRITERIA	13
PARAMETERS OF EVALUATION CRITERIA	15
AWARD OF CONTRACT	18
General Conditions of Contract (GCC)	20
Special Conditions of Contract (SCC)	27
SCHEDULE OF REQUIREMENTS	28
TECHNICAL SPECIFICATIONS	29
SAMPLE FORMS	30
BID FORMS	33
TECHNICAL BID FORM	34
Form -1	35
Form -2	36
Form -3	37
Form -4	38
Form -5	39
Form -6	40
Form -7	41
Financial Bid Form	42
Price Schedule	43
SCHEDULE OF REQUIREMENTS / TENDER SPECIFICATIONS	
ANNEX-1	46
TECHNICAL SPECIFICATIONS	46

INVITATION FOR E-BIDS

PUNJAB AGRICULTURE, FOOD & DRUG AUTHORITY, Lahore

The Director General, PUNJAB AGRICULTURE, FOOD & DRUG AUTHORITY, Government of Punjab, Home Department invites E-Bids on E-PADS (https://punjab.eprocure.gov.pk) from relevant Registered Vendors (Supplier/Firm/Company/Distributor) having established credentials in terms of Technical, Financial & Managerial Capabilities on C&F basis as per Specification details given:

Details	Estimated Cost of Tender	Bid Security	Tender Closing Date & Time	Tender Opening Date & Time
Electrophoresis, Spectrophotometry, and Microbial Analysis Equipment	Rs. 72,000,000/-	01 % of the Estimated Cost Rs. 720,000/-	21 May 2025 at 10:15 AM	21 May 2025 at 10:45 AM

- 1)- Director General, PUNJAB AGRICULTURE, FOOD & DRUG AUTHORITY, Lahore invites **E-Bids** from the firms having established credentials in terms of Technical, Financial and Managerial Capabilities for supply of laboratory equipment as per details given in Specifications, **C&F basis** otherwise bids will be rejected.
- 2)- Bidding shall be conducted through Open Competitive Bidding (Single Stage-Two Envelope) procedures specified in the Punjab Procurement Regulatory Authority Rules PPRA 2014 (amended up to date), and is opened to all eligible bidders as defined in the bidding document.
- 3) Bidding document can be downloaded on EPADS (https://punjab.eprocure.gov.pk).
- 4) Bidding documents are also available on the Punjab Procurement Regulatory Authority website (www.ppra.punjab.gov.pk) until the closing date for the submission of **E-**bids.
- 5)- The original financial instrument i.e. **1% bid security** of the estimated amount in the form of Pay order/ CDR/Bank guarantee, in the name of The Director General, PUNJAB AGRICULTURE, FOOD & DRUG AUTHORITY Lahore, must be submitted physically in the office, and enter details on E-PADS before the closing date & time of the tender.
- 6) The **E-Bids** received till the stipulated date & time will be opened in the committee room of PUNJAB AGRICULTURE, FOOD & DRUG AUTHORITY, Multan Road, Thokar Niaz Baig, Lahore on the stipulated date and time in the presence of Purchase committee of this office, and the bidders (owner) or their authorized representatives having Authority Letters with them.

- 7) The Interested bidders are required to upload their E-Bid (Technical Bid along with documents necessary for qualification & Financial Bid) on E-PADS on or before the Closing time & date as stipulated by the **procuring agency.** All documents should contain page markings, **attached/Scanned** in sequence as indicated for evaluation and signature **& stamp** of authorized person. The **E-Bids** shall be evaluated based on Evaluation Criteria.
- 8)- The technical proposal must contain the Generic names of the items as mentioned in the bidding document along with the proprietary names, if considered necessary.
- 9)- In case the date of **opening** is declared as a public holiday by the Government or a non-working day due to any reason, the opening of **E-Bids will be on the next working day at same time.**
- 10) The bidders are requested to give their best and final prices. All other terms & conditions are mentioned in the bidding document and will be part of the contract and proceedings. The e-procurement process shall be governed under the Punjab Procurement Regulations 2024 and Punjab Procurement Rules PPRA 2014 (amended to date).
- 11) Taxes will be deducted as per applicable government rules and regulations.
- 12) NTN and Active Sales Tax & Income Tax registration certificate must be provided.
- 13) Procuring Agency: PUNJAB AGRICULTURE, FOOD & DRUG AUTHORITY, Lahore.

For obtaining any further information /clarifications, please contact at the following:

Primary Contact:

Name: Sabahat Nisar

Designation: Deputy Director, PMO PAFDA

Contact: 042-99233619

Secondary Contact:

Name: Waheed Anwar Designation: Admin Officer Contact: 042-99233616

BID DATA SHEET					
	Description	Detail			
	Commencement of Availability Bidding Document	Soon after publishing of advertisement on PPRA & E-PADS website			
	Last date and time for Availability of Bidding Document on E-PADS	21 st May 2025 at 10:15 AM E-PADS			
Instruction to Bidder (ITB)	Date, Time, and venue of opening of Technical E-Bids	21st May 2025 at 10:45 AM Committee Room of the PUNJAB AGRICULTURE, FOOD & DRUG AUTHORITY, Lahore.			
Invitation to Bidder Reference	Bid currency	USD or any other foreign currency.			
Reference	Language of bid	ENGLISH			
	Amount of bid security	1% of the estimated price of Tender			
	Bid validity period	180 Days			
	Bidding procedure	Single stage – Two Envelope Procedure			
	Address for Communication: PUNJAB AGRICULTURE, FOOD & DRUG AUTHORIT Multan Road, Thokar Niaz Baig Lahore. Ph #: 042-99233616				

Instructions to Bidders. (ITB)

INTRODUCTION

GENERAL

1.1. The Procuring Agency as mentioned in the Bid Data Sheet has allocated funds towards the cost of "Equipment".

2. ELIGIBLE BIDDERS

- 2.1. This Invitation for Bids (IFB) is open to all Manufacturers, through their local/Pakistani Authorized Agents/ Importers / Distributors. Joint Ventures are not eligible to participate in this bidding process.
- 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 IFB.
- 2.3. Bidders are not eligible to bid if they are under a declaration of ineligibility or have been blacklisted by the Procuring Agency (PAFDA).

3. ELIGIBLE GOODS

3.1. All goods and related services to be supplied under the contract shall have their origin in eligible source countries and all expenditures made under the contract shall be limited to such goods and services. For this purpose, the term "Goods" includes any Goods that are the subject of this IFB and the term "Services" shall include related services such as installation, commissioning, transportation, insurance, maintenance etc. The "Origin" means the place where the goods are manufactured

THE BIDDING PROCEDURE

4. SINGLE STAGE –TWO ENVELOP PROCEDURE

- a. **Single Stage Two Envelopes Bidding** Procedure as per PPRA Rules shall be applied:
 - b. All the procurement procedures will be done strictly in accordance with the PPRA Rules, 2014 (Amended to date). Single stage / two envelops bidding procedure shall be applied. The Document to be uploaded on E-PADS shall be marked as FINANCIAL PROPOSAL and TECHNICAL PROPOSAL in bold and Capital letters. The Financial proposal of **E-Bids** found technically non-responsive shall be remained un-opened.
- c. The Procuring Agency shall evaluate the Technical Proposal, without reference to the price and reject any proposal which do not conform to the specified requirements; during the technical evaluation, no amendments in the technical proposal shall be permitted.

- d. The Financial Proposals of **E-Bids** shall be opened publicly on E-PADS at a time, date and venue will be announced and communicated to the bidders in advance.
- e. After the evaluation and approval of the technical proposal, the Procuring Agency shall at a time within the bid validity period, publicly open the financial proposals of the technically accepted **E-Bids** only.
- f. The financial proposal of **E-Bids** found technically non-responsive or non-compliant shall not be opened.
- g. The bid with Lowest Evaluated value shall be accepted.
- h. The e-procurement process shall be governed under the Punjab Procurement Rules PPRA 2014 (amended to date).

THE BIDDING DOCUMENTS

CONTENTS OF BIDDING DOCUMENTS

- 5.1. The Bidding Documents include:
 - I. Instructions to Bidders (ITB);
 - II. General Conditions of Contract (GCC):
 - III. Special Conditions of Contract (SCC);
 - IV. Schedule of Requirements;
 - V. Technical Specifications;
 - VI. Contract Form:
 - VII. Manufacturer's Authorization Form;
 - VIII. Performance Guarantee Form;
 - IX. Bid Data Sheet
 - X. Bid Form; and
 - XI. Price Schedules.
- 5.2. In case of discrepancies between the Tender Notice and the Bidding Documents, the Bidding Documents shall take precedence.
- 5.3. The bidders are expected to examine all instructions, forms, terms, and specifications in the bidding documents. Failure to furnish complete information required in the bidding documents or to submit a bid not substantially responsive to the bidding documents may result in rejection.

6. AMENDMENT OF BIDDING DOCUMENTS

- 6.1. At any time prior to the deadline for submission of bids, the Procuring Agency may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the bidding documents by amendment.
- 6.2. In order to allow prospective bidders reasonable time to take the amendment(s) into account in preparing their bids, the Procuring

Agency may, at its discretion, extend the deadline for submission of the bids as deemed appropriate.

PREPARATION OF BIDS

7. LANGUAGE OF BID

7.1. Preparation of Bids

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 in English. Supporting documents and printed literature furnished by the bidder may be accepted in another language provided these are accompanied by an accurate and certified translation of the relevant passages in English by a certified translator. In such a case for the purposes of interpretation of the Bid, the translated version shall prevail.

8. DOCUMENTS COMPRISING THE BID

The bid shall comprise the following components:

- a. The Document uploaded shall indicate the Title of the Document also name and address of the bidder. The details and scanned copy of bid security should be uploaded before uploading Technical and Bidding documents.
- b. The **Technical and Financial properly scanned must be uploaded separately on E-PADS** also clearly show the Bid title and bidder's name and address. Failure to comply with this requirement may result in rejection of the bid and the committee decision in this regard shall be final. **E-Bids** submitted after the prescribed time shall not be entertained.
- c. Only technical proposal will be opened by the purchase committee. The financial proposal will be opened by the purchase committee of responsive / technically successful bidders later on the declared time, place & date. Financial proposal of the non-responsive/ technically unsuccessful bidders will be un-opened as per PPRA Rules 2014(Amended up to date).
- d. All the pages of technical & financial E-Bids should be marked as page. No.
- e. Substandard, Illegible & substituted E-Bids will not be acceptable.
- f. Tenderer must have NTN Certificate, should be financially sound and well reputed. Bad reputed will not be entertained.
- g. **E-Bids** shall remain valid for a period of 180 Days after opening of technical bid. A bid valid for shorter period shall be rejected as non-responsive. Extendable equal to the period of the original bid validity.
- h. Bid Form and Price Schedule completed in accordance with instruction to bidders (to be submitted along with financial proposal).
- Documentary evidence established in accordance with instruction to bidders that the bidder is eligible to bid and is qualified to perform the Contract if its bid is accepted.
- j. Documentary evidence established in accordance within instruction to bidders that the goods to be supplied by the bidder are eligible goods and

conforms to the bidding documents; and Bid Security, furnished in accordance with instruction to bidders.

- k. Where a sample(s) is required by a procuring agency, the sample shall be:
- Submitted as part of the bid, in the quantities, dimensions and other details requested in the Bidding Documents;
- Carriage paid;
- Received on, or before, the closing time and date for the submission of E-Bids; and
- Evaluated to determine compliance with all characteristics listed in the Bidding Documents.

{However, the procuring agency may also opt to ask for samples after submission of technical E-Bids (where require)}

- I. The Procuring Agency may retain the sample(s) of the successful Bidder till the successful delivery of the goods. A Procuring Agency may reject the Bid if the sample(s)-
- Do(es) not conform to all characteristics prescribed in the bidding documents; and
- Is/are not submitted within the specified time clearly mentioned in the Bid Data Sheet
- m. All samples produced from materials belonging to an unsuccessful Bidder may be kept by the Procuring Agency till thirty (30) days from the date of award of contract or exhaust of all the grievance forums (including those pending at Authority's Level or in some Court of Law).
- n. The documentary evidence of conformity of the goods may be in the form of literature, drawings, data and shall consist of:
 - a detailed description of the essential technical and performance characteristics of the goods;
- 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
- an item-by-item commentary on the Procuring Agency's Technical Specifications demonstrating responsiveness of the goods and services to those specifications, or a statement of deviations and exceptions to the provisions of the Technical Specifications.

9. BID PRICES

- 9.1. The prices and discounts quoted by the Bidder in the Bid Form and in the Price Schedules shall conform to the requirements specified below.
- 9.2. All items in the Schedule of Supply must be listed and priced separately in the Price Schedules. If a Price Schedule shows items listed but not priced, their prices shall be assumed to be included in the prices of other items. Items not listed in the Price Schedule shall be assumed not to be included in the Bid.

- 9.3. The price to be quoted in the Bid Form shall be the total price of the Bid excluding any discounts offered.
- 9.4. The Bidder shall quote any unconditional discounts and the methodology for their application in the Bid Form.
- 9.5. Prices proposed for Goods in the Price Schedule Forms shall be quoted item wise. This item wise quotation shall be solely for the purpose of facilitating the comparison of Bids by the Procuring Agency. This shall not in any way limit the Procuring Agency's right to contract on any of the terms offered:
- 9.6.
- a. Price Schedule for Goods offered
 - i. Detailed Specification of Items
 - ii. Model / Cat No.
 - iii. Name of Manufacturer.
 - iv. Country of Origin
 - v. Quantity of item
 - vi. Unit
 - vii. The unit price of the goods quoted on C&F basis
- viii. If there is no mention of taxes, the offered/quoted price will be considered as inclusive of all prevailing taxes/duties. The benefit of exemption from or reduction in the GST or other taxes during the contract period shall be passed on to the Procuring Agency;
- 9.7. Final Prices quoted by the Bidder shall be fixed during the Bidder's performance of the Contract and not subject to variation on any account. A Bid submitted with an adjustable price quotation shall be treated as nonresponsive and shall be rejected.

10. BID CURRENCIES

10.1. Price shall be quoted in foreign currency for goods offered outside the Procuring Agency's country on C&F Basis.

11. DOCUMENTS ESTABLISHING GOODS' ELIGIBILITY AND CONFORMITY TO BIDDING DOCUMENTS

- 11.1. Pursuant to ITB Clause 8, 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.
- 11.2. The documentary evidence of the country of origin of the goods shall be confirmed.
- 11.3. The documentary evidence of conformity of the goods
 - a) Detailed description of the essential technical and performance characteristics of the goods.
 - b) Also 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.

11.4. For purposes of the commentary to be furnished pursuant to ITB Clause 11.3(b) 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 equivalence to those designated in the Technical Specifications.

12. BID SECURITY

- a. Bid Security @ 1% of the estimated price in the shape of CDR / Pay Order / Bank Guarantee in the name of "Director General, PUNJAB AGRICULTURE, FOOD & DRUG AUTHORITY, Lahore from any schedule bank shall be furnished by the bidder along with offer.
- b. The financial proposal of the **E-Bids** found technically non-responsive shall be retained unopened and shall be returned on the expiry of the grievance period or the decision of the complaint, if any, filed by the non-responsive bidder, whichever is later: provided that the procuring agency may return the sealed financial proposal earlier if the disqualified or nonresponsive bidder, contractor or consultant submits an affidavit, through an authorized representative, to the effect that he is satisfied with the proceedings of the procuring agency.
- c. Unsuccessful Bidders' Bid security will be returned by the Procuring Agency in pursuant to Instructions to Bidders as per rule 38(2)(a)(vii) of PPR-14:
- d. The Bid security may be forfeited: If a Bidder withdraws its Bid during the period of Bid validity specified by the Bidder on the Bid Form; or In the case of a successful Bidder, if the Bidder:
 - Fails to sign the contract in accordance with ITB.
 - · Fails to furnish Performance Guarantee in accordance with ITB; or
 - If the blacklisting proceedings under Section-17A of PPRA Act, 2009 read with Rule21 of PPR-14 are initiated and the bidder is declared blacklisted after due process of law.

13. BID VALIDITY

- 13.1. Shall remain valid for the 180 days
- 13.2. The Procuring Agency shall ordinarily be under an obligation to process and evaluate the bids within the stipulated bid validity period. However, for any reasons to be recorded in writing, if an extension is considered necessary, all those who have submitted their bids shall be asked to

extend their respective bid validity period.

14. SUBMISSION OF BIDS

a. Deadline for Submission of E-Bid: The Interested bidders are required to upload their E-Bid (Technical Bid along with documents necessary for qualification & Financial Bid) on EPADS on or before the Closing time & date as stipulated by the procuring agency.

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

b. Late Bid: Any bid received by the Procuring Agency after the deadline for submission of bids prescribed by the Procuring Agency shall be **rejected**. Modification & Withdrawal of Bids: The bidder may with draw its bid after the bid's submission and prior deadline to the prescribed for submission of bids. No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified in instruction to bidders.

A Bidder may withdraw its Bid after it has been submitted, provided that written notice of the withdrawal of the Bid, is received by the Procuring Agency prior to the deadline for submission of Bids.

Revised bid may be submitted after the withdrawal of the original bid before the deadline for submission of Bids. No Bid may be modified after the deadline for submission of Bids.

OPENING AND EVALUATION OF BIDS

Opening of Bids:

The Procuring Agency will open all E-Bids, in public, in the presence of Bidders' or their representatives at the place, on the date and at the time, specified in the Bid Data Sheet. The Bidders' representatives present shall sign a register/attendance sheet as proof of their attendance. The omission of a Bidder's signature on the record shall not invalidate the contents and affect the record.

The E-Bids uploaded till stipulated date and time on E-PADS will be opened on the same closing date on time stipulated by the procuring agency, in the presence of bidders or their representative. (Attendance will be marked on E- PADS).

Eliqibility Criteria:

The Applicants fulfilling the following basic eligibility criteria shall only be considered for further evaluation (relevant documents to be attached):

I. Valid legal entity of the Applicant e.g. Certificate of registration from SECP or registrar of firms for Local Applicant Firm. Foreign Applicant must attach a

similar certificate from their home country.

- II. Quoted all items specified in the Tender (Excluding Consumables & Chemicals).
- III. Certificate of registration with Income Tax and WHT with FBR for Local Firms. Foreign Applicants must attach a similar certificate from their home country.
- IV. Affidavit on non-judicial stamp paper that non-performance of a contract did not occur within the last ten years based on information on all settled disputes or litigation.
- V. Judicial Affidavit declaring "Neither the Applicant nor its Directors, Stakeholders, as a whole or as a part of the firm have ever been blacklisted by the Procuring Agency".
- VI. Provide separate undertaking that the information supplied by the Applicant firm is correct.
- VII. Complete details of factory Trained local service staff.

 Note: OEM, Local Distributor have to meet in full the aforementioned basic Eligibility Criteria.

Qualification Criteria:

Qualification will be based on applicant's meeting the following criteria as demonstrated by the applicant's response to this criterion provided by the Applicant:

- 1. Certificate of Company/Firm Registration/Incorporation under the laws of Pakistan;
- 2. Detail of relevant Projects (Successfully completed and ongoing projects);
- 3. Affidavit and a list to be provided as per evaluation Criteria;
- 4. Submission of undertaking on legal valid and attested stamp paper that the firm is Not blacklisted by the Procuring Agency.
- 5. Audited financial statements supported by audit letters/Income Tax Returns for the last three (03) years.
- 6. Undertaking (All terms & conditions and qualifications listed anywhere in this document.
- 7. Covering letter duly signed and stamped by authorized representative.
- 8. Financial Capacity as per evaluation criteria;
- 9. Valid Registration Certificate for Income Tax & Sales Tax;

Verifiable documentary proof of the mandatory and other requirements mentioned in this document must be submitted along with the below form, noncompliance of which shall lead to disqualification.

EVALUATION CRITERIA

IMPORTANT NOTE: -

All the applicants please note that as per PPRA Rules and Regulations, all the documents/statements submitted by Interested Parties are under Oath.

Any document/statement provided if proved false, misstated, concocted, or incorrect at any time during or after the bidding process will result in permanent disqualification and blacklisting of the firm/Company/Partners with their names displayed on PPRA website.

PASS MARKS: Based on the conditions listed in this document, a Proposal not meeting the criteria will be rejected.

The Firms who have duly complied with the Qualification and Evaluation Criteria against each item will be eligible.

If the Evaluation Committee deemed necessary further clarification or information, it is the responsibility of the Supplier to provide such information in the span of time mentioned in such case. Failure to do so would lead to disqualification.

The proposals shall be evaluated by the technical evaluation committee in the light of following evaluation criteria:

PARAMETERS OF EVALUATION CRITERIA

The Firm/Company securing less than 65% marks will be disqualified

-Total Marks: 100 Qualification Marks 65 (65%) + Mandatory

Note: Bidders must index and sequence their bids with separators as per eligibility criteria. Non-compliance will result in disqualification.

Category	Description	Points		Compliance/ Points
	Income Tax Registration	Mandato	ory	
	General Sales Tax Registration (Active)	Mandato	ory	
Legal	Principal's Authorization letter for supply, installation and after sale service / maintenance of the quoted product in favor of bidder.	Mandato	ory	
(Mandatory) For local partners.	Undertaking that the firm is not blacklisted and involved in litigation with the Procuring Agency (PAFDA) on stamp paper.	Mandato	ory	
	In-house technical support for repair & maintenance setup/ Workshop (AFFIDAVIT)	Mandato	ory	
Financial strength of	Income Tax Returns/Audited Reports Average Annual Turnover	15-20 million	10 Points	
the firm	(01-07-2021 to 30-06-2024)	>20-25 million	20 Points	
	(last 03-year) (Max Points 30)	>25 million	30 Points	
Company Establishment	,	<3 Years	0 points	
	No. of years of incorporation / Establishment of Firm (Max Points 30 points)	3-5 Years	10 Points	
		6-8 Years	20 Points	
		8+ Years	30 Points	
Professional	Total No. of technically trained employees (Engineers, technicians) in the firm	<2	0 Points	
Staff (Technical)	(Affidavit and a list to be provided)	2-3	5 Points	
(Technical)	(Max Points 15)	4-5	10 Points	
		5+	15 Points	
	Instrument-specific training certificate issued by the manufacturer for technically trained employees. (Points 5)	≥1	5 Points	
Technical Competencies of	Technical		5 Points	
the Firm	List of relevant contracts performed by the bidder (Attach Work orders)	1-2 3-4	10 Points	
	(Max Points 20)	5+	20 Points	

Note:

- Verifiable documentary proof for all above requirements and criteria points are mandatory requirement and marks will be awarded on the basis of these verifiable prove.
- ii. No compromise shall be made on minimum requirements of qualifying marks.
- iii. Criteria, sub criteria and marking system for the evaluation of applicants shall be as under:
 - a. No amendment in the technical proposal shall be permitted during the

- Technical Evaluation.
- b. After technical evaluation is completed, the Procuring Agency shall notify the date, time for opening of the financial proposals. Attendance of technically responsive Bidders at the opening of financial proposals is optional. The financial proposals of technically non-responsive Bidders shall be returned unopened.
- c. Financial proposals of only the technically responsive Bidders shall be opened publicly in the presence of their representatives who choose to attend. The total prices will be read aloud and recorded.
- d. Incomplete bid shall stand rejected. All items described in the technical proposal must be priced in financial proposal. Items described in the technical proposal but not priced shall be assumed to be included in the price of other items.
- e. Minor oversight, clerical mistakes, other minor inconsistencies that do not alter the substances of the financial bid may be corrected by the Procuring Agency. When correcting computation error in case of discrepancy between a partial amount and the total amount or between the words and figures, the formers will prevail.
- f. Bid found to be the lowest evaluated shall be accepted.

15. CLARIFICATION OF BIDS

15.1. 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 or by email, and no change in the prices or substance of the bid shall be sought, offered, or permitted.

16. PRELIMINARY EXAMINATION

- 16.1. The Procuring Agency will examine the bids to determine whether these are complete, required sureties have been furnished, the documents have been properly signed by Authorized Representative, and the bids are generally in order.
- 16.2. The Procuring Agency may waive any minor discrepancy, 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.
- 16.3. Prior to the detailed evaluation, pursuant to ITB Clause 21 the Procuring Agency will determine the substantial responsiveness of each bid. For this purpose, a substantially responsive bid is one which conforms to all the terms and conditions of the bidding documents without material deviation. Deviations from, or objections or reservations on critical provisions, such as those concerning Bid Security, Applicable Law, Taxes and Duties, 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.

17. EVALUATION AND COMPARISON OF BIDS

- 17.1. The Procuring Agency will evaluate and examine the bids which have been determined to be substantially responsive, pursuant to ITB Clause 20.
- 17.2. The Procuring Agency's evaluation of a bid will be on C&F basis.
- 17.3. For the purpose of evaluation of bids quoted in different currencies, the price shall be converted into Pak Rupees. The rate of exchange shall be the selling rate of those currencies, prevailing on the date of opening of Financial Bids specified in the bidding documents,
- 17.4. Arithmetical errors will be rectified on the following basis.
 - a 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.
 - b If there is a discrepancy between words and figures, the amount in words will prevail.
 - c If the Bidder does not accept the correction of the errors, its bid will be rejected, and its bid security may be forfeited

18. CONTACTING THE PROCURING AGENCY

- 18.1. No bidder shall contact the Procuring Agency on any matter relating to its bid, from the time of the bid opening to the time the Contract is awarded. If any bidder wishes to bring additional information to the notice of the Procuring Agency, it may do so in writing or through email.
- 18.2. Any direct or indirect effort by a bidding firm to influence the Procuring Agency during the process of selection of a bidder or award of contract may besides rejection of its bid result into its disqualification from participation in the Procuring Agency's future bids.

19. REJECTION OF BIDS

19.1. Notwithstanding anything stated in this document, the Procuring Agency may reject any or all bids at any time prior to the acceptance of a bid. The Procuring Agency may upon request, communicate to a bidder, the grounds for its rejection, but shall not be under obligation to justify those grounds.

AWARD OF CONTRACT

20. ACCEPTANCE OF BID AND AWARD CRITERIA

20.1. The bidder with lowest evaluated bid under clause 19, 20 & 21, if not in conflict with any other law, rules, regulations or policy of the Government, will be awarded the contract within the original or extended period of bid validity.

21. PROCURING AGENCY'S RIGHT TO VARY QUANTITIES

21.1. The Procuring Agency reserves the right to increase or decrease the quantity of items originally specified in the Price Schedule and Schedule of Requirements without any change in unit price or other terms and conditions as per provisions in PPRA Rules 2014.

22. NOTIFICATION OF AWARD

22.1. Prior to the expiry of the original or extended period of bid validity, the successful bidder will be informed in writing or email of acceptance of its bid by the Procuring Agency by issuing a letter of award.

23. PERFORMANCE SECURITY

- 23.1. The successful Bidder shall furnish Performance Security, in the form of Bank guarantee of CDR, within 30 days from the date of letter of award. Upon submission of acceptable Performance Security, the Bid Security will be returned to the Bidder. The amount of Performance Security is specified at Bid Data Sheet.
- 23.2. Failure of the successful Bidder to comply with any of the requirements specified in this document shall be considered as sufficient grounds for the annulment of the award of contract and forfeiture of the Bid Security. In which event the Procuring Agency may award the contract to the next lowest evaluated Bidder.

24. SIGNING OF CONTRACT

24.1. Upon furnishing of acceptable Performance Security under the Conditions of Contract, formal Agreement (on stamp paper as per Stamp Act 1899, cost of which shall be borne by the successful Bidder) between the Procuring Agency and the successful bidder shall be executed.

25. CORRUPT OR FRAUDULENT PRACTICES

25.1.

a The Procuring Agency and the Bidders / Manufacturers / Contractors are expected to observe the highest standard of ethics during the

procurement and execution of the Contract. In pursuance of this policy, the relevant terms / phrases as may apply are defined below:

- "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;
- The Procuring Agency will take all possible administrative / legal measures if it is found that the Bidder recommended for award was / is engaged in corrupt or fraudulent practice(s) before or after signing of the contract resulting into the conviction of the proprietor under criminal case besides blacklisting of the firm either indefinitely or for such period of time as may be determined by the Procuring Agency.
- Will declare a firm ineligible, either indefinitely or for a stated specified period of time, for the award of a Contract if it, at any time, determines that the firm has engaged in corrupt or fraudulent practices in competing for or in executing a Contract.

General Conditions of Contract (GCC)

1. DEFINITIONS

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 Bidder, 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 Bidder under the Contract for the full and proper performance of its Contractual obligations.
- c. "Goods" means all the commodities, raw material, machinery and equipment, and/or other materials that the Supplier is required to supply to the Procuring Agency under the Contract.
- d. "Related Services" means the services incidental to the supply of the goods, such as insurance, installation, training and initial maintenance, printing of special instructions or the labels, packing, design and logo of the Procuring Agency, transportation of goods up to the desired destinations and other such obligations of the Bidder covered under the Contract.
- e. "GCC" means the General Conditions of Contract contained in this section.
- f. "SCC" means the Special Conditions of Contract contained in the relevant section of this document.
- g. "The Procuring Agency" means the Punjab Agriculture, Food and Drug Authority (PAFDA)- Lahore
- h. "The Bidder" means the individual or firm offering/participating in supplying the goods under this Bidding Document.
- i. "Day" means official working day excluding national holidays.

APPLICATION

These General Conditions shall apply to the extent that they are not inconsistent with provisions of other parts of the Bidding Documents/Contract.

3. STANDARDS

The goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications goods eligibility criteria.

4. USE OF CONTRACT DOCUMENTS AND INFORMATION

- 4.1. The Bidder 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 Bidder in the performance of the Contract. Disclosure to such employed person shall be made in confidence and shall extend only, as far as may be' necessary, to such performance and not further or otherwise.
- 4.2. Any document, other than the Contract itself, shall remain the property of the Procuring Agency and shall be returned (all copies) on completion of the Bidder's performance under the Contract.
- 4.3. The Bidder shall permit the Procuring Agency to inspect the Bidder's accounts and records relating to the performance of the Supplies.

5. PATENT RIGHTS

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

6. ENSURING STORAGE ARRANGEMENTS

To ensure storage arrangements for the intended supplies, the Bidder shall inform the Procuring Agency before goods are loaded on ship and at least four weeks prior to the arrival of the consignments at its store / warehouse. However, in case no space is available at its store / warehouse at the time of supply, the Procuring Agency shall, within ten days to such a situation, inform the Bidder, in writing, of the possible time-frame of availability of space by which the supplies could be made. In case the Bidder abides by the given time frame, he will not be penalized for delay.

DELIVERY AND DOCUMENTS

The Bidder shall in accordance with the terms specified in the Schedule of Requirements make delivery of the goods. Details of documents to be furnished by the Bidder are specified.

8. INCIDENTAL SERVICES

The Bidder will be required to provide to the Procuring Agency incidental services the cost of which should be included in the total bid price. Incidental services as mentioned earlier

9. WARRANTY / GUARANTEE

9.1 The Contractor shall provide Manufacturer's warranty of supplied equipment including hardware & software as required in the specifications. During the warranty period the contractor shall ensure remedy, at his expense

(including labor & Spare Parts), all defects in design, materials and workmanship that may develop or are revealed under normal of the

- goods/services.
- 9.2 The Contractor shall warrant to the Purchaser that the Goods/Services supplied by the Contractor, under the Contract are genuine, brand new, non-refurbished, un-altered in any way, of the most recent or current model, imported through proper channel, and incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.
- 9.3 The Contractor shall further warrant that the Goods/Services supplied by the Contractor, under the Contract shall have no defect, arising from design, materials, workmanship or from any act or omission of the Contractor that may develop under normal use of the supplied Goods/Services.
- 9.4 The time period of warranty / guarantee means the i.). Period of Twelve (12) Months from the date on which the items have been commissioned and demonstrated to the Procuring Agency and accepted in writing or ii). 18 months after the delivery of equipment. Further Twelve (12) month extended warranty (as standard Warranty) shall also be provided by the contractor with standard warranty after the expiry of the standard warranty as mentioned either (i) or (ii). Three years paid extended warranty shall also be provided (See Price Schedule).
- also be provided, whose cost would be decided at the time of procurement.
- 9.6 During the period of warranty / guarantee, the Supplier shall rectify at its expense, all defects in design, materials, and workmanship that may develop or are revealed under normal use of the goods upon receiving written notice from the Procuring Agency or the consignee; the notice shall indicate in what respect the goods have developed a fault. The provisions of this clause include all the expenses that the Supplier 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 Site.
- 9.7 The Bidder shall provide undertaking for supply of spare parts, kits and chemicals, consumables, disposables, films etc. for at least 10 years (where applicable).
- 9.8 The Bidder shall separately quote the price of the Annual Comprehensive Extended Warranty inclusive of all types of parts & machine consumables, for the post warranty period of 03 years. The Supplier shall remain responsible for providing after sale services after expiry of 01-year warranty / 18 months after delivery) and 01-year extended warranty period/ guarantee period and sign a post warranty Service Contract including Parts with consignee for a period of 03 years (if required by the consignee)
- 9.9 Net Present Value (NPV) based calculation, shall be applied to 03 Years
 paid Extended Warranty Prices quoted by bidders. Criteria for Financial Evaluation is mentioned in the Price Schedule. The Bidder achieving the lowest rates in Equipment Cost and NPV based Cost in Extended Warranty Prices will be awarded the Contract. NPV based calculation is only for financial ranking, the contract will be awarded asper actual quoted rates.
- 9.10 Supplier shall ensure a minimum of <u>one visit per month</u> by a qualified technical resource for the preventive maintenance of the supplied equipment. Supplier will maintain a monthly basis service report signed by concerned end user during warranty period.
- 9.11 Supplier shall ensure the availability of a qualified technical resource for on call services 24/7 during the currency of warranty period.

10. ASSIGNMENT

- 10.1. The Bidder shall not assign, in whole or in part, its obligations to perform to another party under this Contract, except with the Procuring Agency's prior written consent.
- 10.2. The procuring agency may assign any or all rights and responsibilities to another agency or entity.

11. DELAYS IN THE BIDDER'S PERFORMANCE

- 11.1. Delivery of the goods shall be made by the Bidder in accordance with the time schedule prescribed by the Procuring Agency in the Schedule of Requirements / Contract Award.
- 11.2. If at any time in the course of performance of the Contract, the Bidder encounters anything impeding timely delivery of the goods, he shall promptly notify the Procuring Agency in writing of the causes of delay and its likely duration. As soon as practicable, after receipt of the Bidder's notice, the Procuring Agency shall evaluate the situation and may, depending on merits of the situation, extend the Bidder's time for performance, in which case the extension shall be ratified by the Parties by a supplementary Contract to be treated as an addendum to the original contract.

12. TERMINATION FOR DEFAULT

- 12.1. The Procuring Agency may, without prejudice to any other remedy for breach of Contract, by a written notice of default sent to the Bidder, terminate this Contract in whole or in part if:
 - a. The Bidder fails to deliver any or all installments of the goods within the period(s) specified in the Contract, or within any extension thereof granted by the Procuring Agency;
 - b. The Bidder fails to perform any other obligation(s) under the Contract to the satisfaction of the Procuring Agency
 - c. The Bidder has engaged itself in corrupt or fraudulent practices before or after executing the Contract.

13. FORCE MAJEURE

13.1. The Bidder shall not be liable for forfeiture / encashment of its Performance Guaranty/ Bid Security, or termination/ blacklisting for default if and to the extent that this delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure. For the purposes of this Clause Force Majeure means an act of God or an event beyond the control of the Bidder and not involving the Bidder's fault or negligence directly or indirectly purporting to mal-planning, mismanagement and /or lack of foresight to handle the situation. Such events may include but are not restricted to acts of the Procuring Agency in its sovereign capacity, wars or revolutions, fires, floods, earthquakes, strikes, epidemics, quarantine restrictions and freight embargoes. If a Force Majeure situation arises, the

Bidder shall promptly notify the Procuring Agency in writing with sufficient and valid evidence of such condition and the cause thereof.

The Committee, constituted by the Procuring Agency for redressing grievances, will examine the pros and cons of the case and all reasonable alternative means for completion of purchase order under the Contract and will submit its recommendations to the competent authority. However, unless otherwise directed by the Procuring Agency in writing, the Bidder shall continue to perform its obligations under the Contract as far as is reasonably practical and shall seek reasonable alternative means for performance not prevented by the Force Majeure event.

14. TERMINATION FOR INSOLVENCY

14.1. The Procuring Agency may at any time terminate the Contract by giving written notice to the Bidder if the Bidder becomes bankrupt or otherwise insolvent. In that event, termination will be without compensation to the Bidder, provided that such termination will not prejudice or affect any right or remedy which has accrued or will accrue thereafter to the Parties.

15. ARBITRATION AND RESOLUTION OF DISPUTES

- 15.1. The Procuring Agency and the Bidder shall make every effort to resolve amicably by direct informal negotiations any disagreement or dispute arising between them under or in connection with the Contract.
- 15.2. If, after thirty (30) days from the commencement of such informal negotiations, the Procuring Agency and the Bidder have been unable to resolve amicably a Contract dispute, either party may require that the dispute be referred for resolution through arbitration in accordance with the Arbitration Act. 1940.
- 15.3. In case of any dispute concerning the interpretation and/or application of this Contract is to be settled through arbitration, the arbitrator shall be mutually appointed by the Procuring Agency and the Bidders. The decisions taken and/or award given by the sole arbitrator shall be final and binding on the Parties.

PACKING

- 16.1. The Bidder 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 be taken into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.
- 16.2. 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.

17. GOVERNING LANGUAGE

17.1. The Contract shall be written in English language. All correspondence and other documents pertaining to the Contract, which are exchanged by the Parties, shall be written in English.

18. APPLICABLE LAW

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

19. PERFORMANCE SECURITY

19.1. The Bidder shall submit a performance security as specified.

20. LIQUIDATED DAMAGES

20.1 The contractor will do the installation, commissioning, operational training, test run/ Validation within three (03) months of the arrival of the equipment at Purchaser's site and after confirmation from PAFDA for availability site for installation. If the Contractor fails to do the same, ththe e Contractor will pay a sum of one percent (1%) of contract value per week of related unit/ equipment as liquidated damages. Total liquidated damages payable to the Purchaser shall not in any case exceed by ten percent (10%) of the total price of related unit / equipment. However, the liquidating damages shall be applicable on undelivered items, if multiple units are available in lot.

Special Conditions of Contract (SCC)

1. DELIVERY AND DOCUMENTS

(a) Delivery Period:

The delivery period for the supply of goods/services shall be 120 calendar days from the date of opening of the Letter of Credit (LC).

(b) For Goods supplied from abroad on C&F basis:

Details of shipping and documents to be furnished by the Bidder:

Upon shipment, the Bidder shall notify the Procuring Agency by fax or email the full details of the shipment, including Contract number, description of Goods, quantity, the vessel / flight, the Bill of Lading / Air Way Bill and date, port of loading, date of shipment, port of discharge, etc.

The Procuring Agency shall receive the above documents at least before arrival of the Goods at the port or place of arrival and, if not received, the Bidder will be responsible for any consequent expenses.

2. PAYMENT

The method and conditions of payment to be made to the Bidder under this Contract shall be as follows:

For Goods supplied from outside the Procuring Agency's country:

- a) The Procuring Agency shall pay L/C value to the Principal through irrevocable letter of credit in a bank in its country upon submission of all the requisite documents.
- b) 90% of total cost will be paid after receiving of shipping documents and 10% will be paid after installation, commissioning of the equipment and issuance of satisfactory letter from the PAFDA.
- c) The vendor shall be responsible for all **applicable taxes**, whether provincial or federal, excluding CUSTOM duty and income tax.

3. ARBITRATION" AND RESOLUTION OF DISPUTES

Dispute resolution mechanism to be applied shall be as follows:

In case of any dispute concerning the interpretation and/or application of this Contract is to be settled through arbitration, the arbitrator to be Page **27** of **54**

appointed mutually by the Procuring Agency and the Bidder. The decisions taken and/or award given by the sole arbitrator shall be final and binding on the Parties.

4. PACKING

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

PERFORMANCE SECURITY

The successful Bidder shall furnish Performance Security within 30 days from the date of letter of award. Upon submission of Performance Security, the Bid Security will be returned to the Bidder. Performance Security will be equal to 5% of the Contract amount in in shape of a Bank Guarantee/CDR issued by any schedule that will remain with the procuring agency till satisfactory completion of Warranty period. Performance security shall be returned within two years of standard warranty period.

SCHEDULE OF REQUIREMENTS

1. SCHEDULE OF REQUIREMENTS

For Goods supplied from outside the Procuring Agency's country on C&F basis:

- a) The shipment of the items to be imported shall be started as early as possible. The shipment schedule shall be submitted along with the offer and subject to approval by the Procuring Agency.
- b) The bidder must indicate in his offer the port from where the Items will be shipped.
- c) The equipment shall be delivered at site as stated in the Technical Specifications against each item within 120 days from the date of opening of LC.
- d) 90% of total cost will be paid after receiving of shipping documents and 10% will be paid after installation, commissioning of the equipment and issuance of satisfactory letter from the PAFDA.
- e) The cost of consumables, transportation, and any other expenses related to the commissioning of the equipment shall be the sole responsibility of the bidder and shall not be claimed separately.

TECHNICAL SPECIFICATIONS

SPECIFICATIONS

The technical specifications are attached at **ANNEX-1 SPECIAL NOTE**:

- i. The Procuring Agency will evaluate and compare the bids on the basis of each Tender Specified at Annex-1.
- ii. The above specifications are provided for encouraging widest possible competition among the firms. However, inadvertently if a brand name, catalogue No. / Name etc. is used in Technical Specifications, it has only been used for the reference purpose. Goods offered "AT LEAST EQUIVALENT" to requisite specifications shall also be considered.
- iii. Equipment must be inclusive of all the standard accessories.
- iv. The internal civil and MEP work if any required for the equipment installation will be carried-out by the Bidder.
- v. All site specific work required at site for the system viz. Lead Glass/special antistatic flooring, environment control/radiation protection must be included in the price.
- vi. Bidder must provide the User/Technical/Maintenance/ manuals with each equipment.

SAMPLE FORMS

1. PERFORMANCE GUARANTEE/SECURITY FORM

FORM OF PERFORMANCE SECURITY

(Bank Guarantee)

	Guarantee No Executed on Expiry date
[Letter by the Guarantor to the Purchas	er]
Name of Guarantor (Bank) with address:	(0)
Name of Principal (Supplier/Contractor address:	,
Penal Sum of Security (express in word figures)	
Notification of Award No.	Dated
Bidding Documents and above said No	NTS, that in pursuance of the terms of the otification of Award (hereinafter called the e said Principal we, the Guarantor above firmly bound unto the (hereinafter
of which sum well and truly to be made	of the amount stated above for the payment to the said Purchaser, we bind ourselves, and successors, jointly and severally, firmly
THE CONDITION OF THIS OBLIGAT has accepted the Purchaser's above	ION IS SUCH, that whereas the Principal said Notification of Award for (Name of Contract) for the
	_(Name of Project).
NOW THEREFORE if the Principal	(Supplier/Contractor) shall well and truly

NOW THEREFORE, if the Principal (Supplier/Contractor) shall well and truly perform and fulfill all the undertakings, covenants, terms and conditions of the said Documents during the original terms of the said Documents and any extensions thereof that may be granted by the Purchaser, with or without notice to the Guarantor, which notice is, hereby, waived and shall also well and truly perform and fulfill all the undertakings, covenants terms and conditions of the Contract and of any and all modifications of said Documents that may hereafter be made, notice

of which modifications to the Guarantor being hereby waived, then, this obligation to be void; otherwise to remain in full force and virtue till all requirements of GCC, of Conditions of Contract are fulfilled.

Our total liability under this Guarantee is limited to the sum stated above and it is a condition of any liability attaching to us under this Guarantee that the claim for payment in writing shall be received by us within the validity period of this Guarantee, failing which we shall be discharged of our liability, if any, under this Guarantee.

We, ________ (the Guarantor), waiving all objections and defenses under the Contract, do hereby irrevocably and independently guarantee to pay to the Purchaser without delay upon the Purchaser's first written demand without cavil or arguments and without requiring the Purchaser to prove or to show grounds or reasons for such demand any sum or sums up to the amount stated above, against the Purchaser's written declaration that the Principal has refused or failed to perform the obligations under the Contract which payment will be effected by the Guarantor to Purchaser's designated Bank & Account Number.

PROVIDED ALSO THAT the Purchaser shall be the sole and final judge for deciding whether the Principal (Contractor) has duly performed his obligations under the Contract or has defaulted in fulfilling said obligations and the Guarantor shall pay without objection any sum or sums up to the amount stated above upon first written demand from the Purchaser forthwith and without any reference to the Principal or any other person.

IN WITNESS WHEREOF, the above-bounden Guarantor has executed this Instrument under its seal on the date indicated above, the name and corporate seal of the Guarantor being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Witness: 1	Signature
	Name
Corporate Secretary (Seal)	
2	Title
Name, Title & Address	Corporate Guarantor (Seal)

3. CONTRACT FORM

THIS	AGREEMENT	made	the	d	lay (of _	 202*
hetwe	een						

Punjab Agriculture, Food and Drug Authority (hereinafter called "the Procuring Agency") of the one part and **[Name of Bidder]** of **[city and country of Bidder]** (hereinafter called "the Bidder") of the other part:

WHEREAS the Procuring Agency invited bids for certain goods and ancillary services, viz., **[brief description of goods and services]** and has accepted a bid by the Bidder 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.
 - g. the Performance Security
- 3. In consideration of the payments to be made by the Procuring Agency to the Bidder as hereinafter mentioned, the Bidder 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 Bidder 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 in 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 by the Manufacturer / Signed / Sealed by Procuring Agency / Authorized Bidder / Authorized Agent

BID FORMS

TECHNICAL BID FORM

To:
Punjab Agriculture Food and Drug Authority, Lahore, Pakistan We, the
undersigned, declare that:
(a) We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders;
(b) We offer to execute and complete in conformity with the Bidding Documents for the following Tender
 2. 3. 4.
(c) Our Bid consisting of the Technical Bid and the Price Bids hall be valid for a period ofdays from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
(d) As security for due performance of the undertakings and obligations of our bid, we submit there with a Bid security, in the amount specified in Bidding Data Sheet, which is valid (at least) 28 days beyond validity of Bid itself.
(e) We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding process, other than alternative offers submitted in accordance with Bidding Documents (as applicable).
(f) We agree to permit Employer or its representative to inspect our accounts and records and other documents relating to the bid submission and to have them audited by auditors. This permission is extended for verification of any information provided in our Technical Bid which comprises all documents enclosed here with in accordance Bidding Documents.
NameIn the capacity of
Signed Duly authorized to sign the Bid for and on behalf of
AddressDate

.....

Form -1

General Information

1.	Name of Firm		
2.	Head Office Address		
3.	Telephone		
4.	Fax		
5.	Type of Organization		
6.	Place of Year of incorporation/registration		
8.	NTN#		
9.	Name, Designation and Mobile Number of Firm's Representative		

Detail of Owners/ Directors

	Name	Designation	Nationality
1.			
2.			
3.			
4.			

Form -2

Financial Soundness

Name of Applicant			
	Name of Applicant		

A copy of the audited financial statements of the past three (3) financial years must be attached.

Banker	Name of banker	
	Address of banker	
	Telephone	Contact name and title
	Fax	Telex

Summarize documented information in Pak Rupees (equivalent at the current rate of exchange at the end of each year) for the previous three years.

Financial information in Pak Rupees	FY2021-2022	FY2022-2023	FY2023-2024
Annual Turnover			
Total Assists			
Total Liabilities			
Net Worth			
Working Capital			
Current assets			
Current liabilities			
Profits before taxes			
Profits After taxes			
Total Debt			
Total Equity			
Total Revenue			

Summary of Supply & Installation Projects

Name of Applicant		
• •		

Project Name Description of Equipment Supplied/Installed	Organization Name	Year of Completion	Location

List of Technical Staff

Sr. No#	
31. NO#	

Name of Equipment	Manufacturer Name	Name Trained	the	person

DECLARATION OF PROFESSIONAL STAFF EMPLOYMENT

[To be submitted on Company Letterhead]

TO WHOM IT MAY CONCERN

PROJECT:
SUBJECT: <u>DECLARATION OF PROFESSIONAL STAFF EMPLOYMENT & AVAILABILITY</u>
We hereby certify that the personnel nominated in Form-5 are employed by our firm on permanent basis and are available for the above-mentioned Assignment.
Yours Sincerely, COMPANY NAME:
AUTHORIZED REPRESENTATIVE

DECLARATION OF OWNERSHIP/LEASE OF EQUIPMENT

[To be submitted on Company Letterhead]

TO WHOM IT MAY CONCERN

PROJECT:	
SUBJECT: <u>DECLARATION OF OWNERSHIP OF EQUIPMENT</u>	
We hereby certify that the equipment mentioned is owned by our firm a available in Pakistan for the above-mentioned Assignment.	and is
Yours Sincerely,	
COMPANY NAME:	
AUTHORIZED REPRESENTATIVE	

Affidavit

[To be printed on PKR 100 Stamp Paper, duly attested by oath commissioner. To be attached with Technical Bid]
Name:
(Applicant)
I, the undersigned, do hereby certify that all the statements made in the Bidding document and in the supporting documents are true, correct and valid to the best of my knowledge and belief and may be verified by employer if the Employer, at any time, deems it necessary.
The undersigned hereby authorize and request the bank, person, company or corporation to furnish any additional information requested by the [name of Procuring Agency] of the Punjab deemed necessary to verify this statement regarding my (our) competence and general reputation.
The undersigned understands and agrees that further qualifying information may be requested and agrees to furnish any such information at the request of the [name of Procuring Agency]. The undersigned further affirms on behalf of the firm that:
(i) The firm is not currently blacklisted by the Procuring Agency.
(ii) The documents/photocopies provided with Bid are authentic. In case, any fake/bogus document was found at any stage, the firm shall be blacklisted as per Law/ Rules.
(iii) Affidavit for correctness of information.
[Name of the Contractor/ Bidder/ Supplier] undertakes to treat all information provided as confidential.
Signed by an authorized Officer of the company

Title of Officer:

Date:

Name of Company: _____

Financial Bid Form (Provide separate form for each tender Applied)

1. BID FORM

Price Schedule

Criteria for Financial Evaluation and Price schedule in USD (C&F Basis):

Net Present Value (NPV) based calculation, where the lowest bidder is selected on the basis of Present Value of Future Payments, applicable only to 03 Years Extended Warranty Prices quoted by bidders.

Calculation Mechanism:

- (i) 01 Year KIBOR Discount Rate as published by State Bank of Pakistan at the Date of opening of Financial Bids shall be used to discount the future values.
- (ii) The Formula to calculate NPV is as under:

$$ext{NPV} = rac{R_t}{\left(1+i
ight)^t}$$

NPV = Net Present Value

Rt = R represents Cost of Extended Warranty

t represents Year of Extended Warranty

i = KIBOR Discount Rate %

For Example:

Quoted Rates (Bidder A)

Price with Two	Exter	TOTAL		
YearsWarranty	3 rd Year	4 th Year	5th Year	PRICE
USD 50,000	USD 3,000	USD 3,000	USD 2,500	USD 63,500

NPV based Calculation

KIBOR Discount Rate: 8.81%

Price with Two	Exte	TOTAL			
YearsWarranty	3 rd Year	4 th Year	5 th Year	PRICE	
USD 50,000	USD 2,533.87	USD 2,328.71	USD 1,783.47	USD 56,646.05	

NPV based Calculation

KIBOR Discount Rate (1-Year Tenor, Bid Rate) Applicable at the Date of Opening of Financial Bid

The Bidder achieving the lowest rates in Equipment Cost and NPV based Cost in Extended Warranty Prices will be awarded the Contract.

A-PRICE SCHEDULE OF EQUIPMENT OFFERED FROM ABROAD FOR LOT A ON DAP BASIS IN FOREIGN CURRENCY

S#	Detailed Specification of Goods	Model Cat / No.	Name of Manufacturer	Country of Manufacturer	Quantity of items	Unit Price	Total Price
1	2	3	4	5	6	7	8
	Total Amount i						

PRICE SCHEDULE FOR COMPREHENSIVE EXTENDED WARRANTY CONTRACT AFTER EXPIRY OF WARRANTY PERIOD

NOTE: -

Item No.	Brief Description of the goods	Quantity	Comprehensive Extended Warranty Contract Cost for Each year subsequent to completion of two-year warranty period.			Extended Warranty Contract Cost for 03 Years
			3rd	4 th	5 th	

NOTE: -

- 1. The cost of Comprehensive Extended Warranty Contract (Includes all Govt. applicable taxes) which includes preventive maintenance include testing & calibration as per technical / service / operational manual, spare parts, consumable and labour, after satisfactory completion of Warranty period shall be quoted for next 03 years on yearly basis for complete equipment.
- 2. All software updates should be provided free of cost during Comprehensive Extended Warranty Contract period.
- 3. The supplier shall keep sufficient stock of spare parts required during Comprehensive Extended Warranty Contract Period. In case the spare parts are required to be imported, it would be responsibility of the bidder.

SCHEDULE OF REQUIREMENTS / TENDER SPECIFICATIONS ANNEX-1

Lot	Equipment name	Quantity	Estimated Price (PKR)
LOT-118	Colony Counter	03	
	Color Measurement Spectrophotometer	01	
	Electrophoresis Apparatus	02	Rs.
	Fluorescence – UV Observation Equipment	01	72,000,000/-
	Gel Electrophoresis Unit	02	
	PFGE Scanner	01	

TECHNICAL SPECIFICATIONS

LOT-118 - Item 01 - COLONY COUNTER [QUANTITY: 03]

Make		
Model		
Important Note: Bidders must refer page numbers & highlight each technical		
specification line on respective brochures, manuals etc. and must attach demanded		
Certificates mentioned in Regulatory Compliance along with Technical Brochures.		
Technical Specifications:		
Application: Equipment is used for the counting of different colonies grown on various medias (counting on pour plating, surface plating, circle plating, automatic separation of clustered colonies, creation of polygonal exclusion zones etc.) and is applicable in microbiology testing laboratory.		
Must have counting at least 1000 colonies per second or better		
Must have minimum size of colony 0.1 mm or better		
Detection Method: Counting: automatic with manual control or better		

Must have color detection (7 colors on the same dish).

Must have counting on different sizes of dishes and plates ranging from 55-150 mm etc or better

Must have inhibition zone reading on different sizes of dishes e.g 90-100 mm round and 120 mm square dishes or more

Must have maximum number of antibiotics up to 16 antibiotics on a square 120 mm dish or better

Must have reading time: measurement of 10 or more inhibition zones <10 seconds maximum.

Magnification: Color camera – 28X zoom with M12 lens or better

Must have automatic separation of colonies.

Must have Results: PDF report, jpeg, png, bmp, Excel

Must have LIMS and USB connection

Note: The system must be complete with all parts; required calibrators / standards / reference materials; and accessories including Cables, Leads, Sensors, Probes or any other accessory required for measuring all above selected parameters.

Installation: Complete setup of machine and demonstration about operation and key features.

Model Name, Manufacturer Name & Country of Origin: Must be fill in BOQ Structure of Bidder – Technical Specifications Compliance, Lot-wise (Technical Section)

User and Technical Training: Application training for end user at installation site **Accessories:**

Operation & Service manual (Book & CD) 1 set/each (with permanent Service Password / Key)

If required for operation, provide Compatible PC with 24-inch monitor with laser jet Printer, otherwise other compatible printer for printing the recorded results.

Power requirement: 180-240 VA /50-60 Hz.

Regulatory Compliance:

Offered model must be FDA / (CE) or equivalent /MHLW Approved. (Attach Certificate)

Manufacturer should have ISO-9001/ISO-13485/TUV /other Equivalent Certification. (Attach Certificate)

LOT-118 – Item 02 – COLOR MEASUREMENT SPECTROPHOTOMETER [QUANTITY: 01]

Make

Model

Important Note: Bidders must refer page numbers & highlight each technical specification line on respective brochures, manuals etc. and must attach demanded Certificates mentioned in Regulatory Compliance along with Technical Brochures.

Technical Specifications:

Must Be able to measure reflectance, transmittance and haze

Wavelength range should be 350 nm - 800 nm or better

Should have 5 nm optical resolution

Must Have reporting interval

Must Have Three reflectance measurement areas

Should have Automated UV calibration.

Must be equipped with transmission compartment that opens on three sides.

Note: The system must be complete with all parts; required calibrators / standards / reference materials; and accessories including Cables, Leads, Sensors, Probes or any other accessory required for measuring all above selected parameters.

Installation: Complete setup of machine and demonstration about operation and key features.

Model Name, Manufacturer Name & Country of Origin: Must be fill in BOQ Structure of Bidder – Technical Specifications Compliance, Lot-wise (Technical Section)

User and Technical Training: Application training for end user at installation site **Accessories:**

Operation & Service manual (Book & CD) 1 set/each (with permanent Service Password / Key)

If required for operation, provide Compatible PC with 24-inch monitor with laser jet Printer, otherwise other compatible printer for printing the recorded results.

Power requirement: 180-240 VA /50-60 Hz.

Regulatory Compliance:

Must meet all CIE, ASTM and USP color measurement guidelines.

Offered model must be FDA / (CE) or equivalent /MHLW Approved. (Attach Certificate)

Manufacturer should have ISO-9001/ISO-13485/TUV /other Equivalent Certification. (Attach Certificate)

LOT-118 – Item 03 – Electrophoresis Apparatus [QUANTITY: 02]

Make

Model

Important Note: Bidders must refer page numbers & highlight each technical specification line on respective brochures, manuals etc. and must attach demanded Certificates mentioned in Regulatory Compliance along with Technical Brochures.

Technical Specifications:

High resolution separations of charged or polar molecules – up to N > 105 to 106 or better Must be able to perform Various electrophoretic techniques – separate based on mobility, pl value, size, or hydrophobicity

Must be able to perform analysis with injection of nL volumes

Must have no stationary phase

Must have Low consumption of sample and buffer

Must have Cation Solutions Kit, Inorganic Anion Solutions Kit, Forensic Anion Solutions Kit, Organic Acids Solutions Kit

Must have Diagnostic functions RFID tag for lamp, early maintenance feedback,

Pressure system

- Programmable with -100 to +100 mbar on inlet or better
- Flushing with 1 bar or with high pressure 2–12 bar or better
- Vial pressurization with high pressure 2–12 bar on inlet and/or outlet or better

Injection modes

- Self correcting injection system with injection from inlet or outlet
- Programmable range up to 10,000 seconds or better
- Pressure -100 to +100 mbar or better
- Electrokinetic –30 to +30 kV or better

Replenishment

- Satellite station for refilling of inlet or outlet buffer vials with fresh buffer for automatic, continuous operation.
- · Selectable buffer levelling.

Vials

- 100 µL (polypropylene or glas) with resealing snap caps
- 1 mL (polypropylene) with resealing snap caps
- 2 mL (glas) with resealing snap caps

Raw data channels

Detector signals and spectrum, voltage, current, leak current, power, cassette temperature, pressure, lamp voltage and detector temperature

Electrophoresis power

- Voltage range setable 0 to ± 30 kV supply or better
- Current setable 0–300 µA or better
- Power setable 0-6 W or better
- Operation under constant voltage, current or power
- Programmable polarity switch

CE specific software

• Mobility report, time correction

Autosampler/ fraction collector

50-position carousel or better

All vials are randomly accessible from inlet or outlet end of capillary

Temperature control with external water bath with vial temperature from 10–40 °C or better

Detector

Real time UV-Visible diode-array detector (190–600 nm)

Temperature controlled

Wavelength accuracy 1 nm or better

Response time 0.025 to 10 s or better

Light source Pre-aligned deuterium lamp

Signals Up to eight signals simultaneously, full spectral acquisition

Sensitivity: 1 μ M 4-hydroxy-aceto-phenon injected at 50 mbar 5 sec, 3 x 50 μ m bubble cell capillary, signal/noise >6* (50 mM borate buffer pH 9.3, 25 kV) or better

Baseline noise <50 µAU (at 2 sec response time) or better

Linear dynamic range 1x10⁴ (3x50 µm bubble cell capillary) or better

Capillary cassette

High-speed forced-air cooler with Peltier element

Temperature range 10 °C below ambient, up to 60 °C (min. 10 °C cassette temperature) or better

Minimum total capillary length 31 cm or better

Capillary compatibility 365 µm o.d. or better

Note: The system must be complete with all parts; required calibrators / standards / reference materials; and accessories including Cables, Leads, Sensors, Probes or any other accessory required for measuring all above selected parameters.

Installation: Complete setup of machine and demonstration about operation and key features.

Model Name, Manufacturer Name & Country of Origin: Must be fill in BOQ Structure of Bidder – Technical Specifications Compliance, Lot-wise (Technical Section)

User and Technical Training: Application training for end user at installation site **Accessories:**

Operation & Service manual (Book & CD) 1 set/each (with permanent Service Password / Key)

If required for operation, provide Compatible PC with 24-inch monitor with laser jet Printer, otherwise other compatible printer for printing the recorded results.

Power requirement: 180-240 VA /50-60 Hz.

Regulatory Compliance:

Must meet all CIE, ASTM and USP color measurement guidelines.

Offered model must be FDA / (CE) or equivalent /MHLW Approved. (Attach Certificate)

Manufacturer should have ISO-9001/ISO-13485/TUV /other Equivalent Certification. (Attach Certificate)

LOT-118 – Item 04 – Fluoresence UV Observation Cabinet [QUANTITY: 01]

Make

Model

Important Note: Bidders must refer page numbers & highlight each technical specification line on respective brochures, manuals etc. and must attach demanded Certificates mentioned in Regulatory Compliance along with Technical Brochures.

Technical Specifications:

Measurement Technology: Absorbance and Fluorescence intensity

Measurement Type End-point, kinetic, spectra, multipoint and kinetic spectra

Plate Type 6 - 1536 well plates (absorbance 6 - 384 well plates) or equivalent

Light Source Xenon flash lamp

Wavelength Selection Absorbance: double monochromators; Fluorescence intensity: double excitation and emission monochromators; Double monochromators for spectral scanning

Wavelength Range Absorbance: 200 - 1000nm

Fluorescence intensity: Excitation: 200 - 1000nm, Emission: 270 - 840nm

Linearity

- 0 4Abs (96-well plate) at 450nm. ± 2%
- 0 3Abs (384-well plate) at 450nm, ± 2%

Read-out Range 0 - 6Abs

Accuracy 0.003Abs or ± 2%, at 200 - 399nm (0 - 2Abs)

0.003Abs or $\pm 1\%$, at 400 - 1000nm (0 - 3Abs)

Precision SD < 0.001Abs or CV < 0.5%, at 450nm (0 - 3Abs)

Sensitivity Fluorescence intensity (top reading): < 0.4 fmol fluorescein/well (black 384-well plate)

Dynamic Range Fluorescence intensity: top reading > 6 decades

No. of Dispensers One

Dispense Volume

2 - 5,000µL (1mL syringe)

5 - 25,000µL (5mL syringe)

Incubator Temperature up to 45°C

Shaking Orbital

Measurement Speed Reads a 96-well plate in 15 sec., a 384-well plate in 45 sec., and a 1536-well plate in 135 sec. (minimum times)

Interface PC Software, FDA 21 CFR Part 11 compliance.

Note: The system must be complete with all parts; required calibrators / standards / reference materials; and accessories including Cables, Leads, Sensors, Probes or any other accessory required for measuring all above selected parameters.

Installation: Complete setup of machine and demonstration about operation and key features.

Model Name, Manufacturer Name & Country of Origin: Must be fill in BOQ Structure of Bidder – Technical Specifications Compliance, Lot-wise (Technical Section)

User and Technical Training: Application training for end user at installation site **Accessories:**

Operation & Service manual (Book & CD) 1 set/each (with permanent Service Password / Key)

If required for operation, provide Compatible PC with 24-inch monitor with laser jet Printer, otherwise other compatible printer for printing the recorded results.

Power requirement: 180-240 VA /50-60 Hz.

Regulatory Compliance:

Must meet all CIE, ASTM and USP color measurement guidelines.

Offered model must be FDA / (CE) or equivalent /MHLW Approved. (Attach Certificate)

Manufacturer should have ISO-9001/ISO-13485/TUV /other Equivalent Certification. (Attach Certificate)

LOT-118 – Item 05 – GEL ELECTROPHORESIS UNIT [QUANTITY: 02]

Make

Model

Important Note: Bidders must refer page numbers & highlight each technical specification line on respective brochures, manuals etc. and must attach demanded Certificates mentioned in Regulatory Compliance along with Technical Brochures.

Technical Specifications:

High resolution separations of charged or polar molecules – up to N > 105 to 106

Must be able to perform Various electrophoretic techniques – separate based on mobility, pl value, size, or hydrophobicity

Must be able to perform analysis with injection of nL volumes

Must have no stationary phase

Must have Low consumption of sample and buffer

Must have Cation Solutions Kit, Inorganic Anion Solutions Kit, Forensic Anion Solutions Kit, Organic Acids Solutions Kit

Must have Diagnostic functions RFID tag for lamp, early maintenance feedback,

Pressure system

Programmable with -100 to +100 mbar on inlet

Flushing with 1 bar or with high pressure 2–12 bar

Vial pressurization with high pressure 2–12 bar on inlet and/or outlet

Injection modes

Self-correcting injection system with injection from inlet or outlet

Programmable range up to 10,000 seconds

Pressure -100 to +100 mbar

Electrokinetic -30 to +30 kV

Replenishment

Satellite station for refilling of inlet or outlet buffer vials with fresh buffer for automatic, continuous operation.

Selectable buffer levelling.

Vials

100 μL (polypropylene or glas) with resealing snap caps

1 mL (polypropylene) with resealing snap caps

2 mL (glas) with resealing snap caps

Raw data channels

Detector signals and spectrum, voltage, current, leak current, power, cassette temperature, pressure, lamp voltage and detector temperature

Electrophoresis power

Voltage range setable 0 to ± 30 kV supply

Current setable 0-300 µA

Power setable 0-6 W

Operation under constant voltage, current or power

Programmable polarity switch

CE specific software

Mobility report, time correction

Autosampler/ fraction collector

50-position carousel

All vials are randomly accessible from inlet or outlet end of capillary

Temperature control with external water bath with vial temperature from 10-40 °C

Detector Real time UV-Visible diode-array detector (190-600 nm)

Temperature controlled

Wavelength accuracy 1 nm

Response time 0.025 to 10 s

Light source Prealigned deuterium lamp

Signals Up to eight signals simultaneously, full spectral acquisition

Sensitivity 1 μ M 4-hydroxy-aceto-phenon injected at 50 mbar 5 sec, 3 x 50 μ m bubble cell capillary, signal/noise >6* (50 mM borate buffer pH 9.3, 25 kV)

Baseline noise <50 µAU (at 2 sec response time)

Linear dynamic range 1x104 (3x50 µm bubble cell capillary)

Capillary cassette

High-speed forced-air cooler with Peltier element

Temperature range 10 °C below ambient, up to 60 °C (min. 10 °C cassette temperature)

Minimum total capillary length 31 cm

Capillary compatibility 365 µm o.d.

Note: The system must be complete with all parts; required calibrators / standards / reference materials; and accessories including Cables, Leads, Sensors, Probes or any other accessory required for measuring all above selected parameters.

Installation: Complete setup of machine and demonstration about operation and key features.

Model Name, Manufacturer Name & Country of Origin: Must be fill in BOQ Structure of Bidder – Technical Specifications Compliance, Lot-wise (Technical Section)

User and Technical Training: Application training for end user at installation site **Accessories:**

Operation & Service manual (Book & CD) 1 set/each (with permanent Service Password / Key)

If required for operation, provide Compatible PC with 24-inch monitor with laser jet Printer, otherwise other compatible printer for printing the recorded results.

Power requirement: 180-240 VA /50-60 Hz.

Regulatory Compliance:

Must meet all CIE, ASTM and USP color measurement guidelines.

Offered model must be FDA / (CE) or equivalent /MHLW Approved. (Attach Certificate)

Manufacturer should have ISO-9001/ISO-13485/TUV /other Equivalent Certification. (Attach Certificate)

LOT-118 - Item 06 - PFGE APPARATUS [QUANTITY: 01]

Make

Model

Important Note: Bidders must refer page numbers & highlight each technical specification line on respective brochures, manuals etc. and must attach demanded Certificates mentioned in Regulatory Compliance along with Technical Brochures.

Technical Specifications:

Pulse electric field power supply module

Must Adopt microprocessor intelligent control, with program editing and automatic connection function, overload and no-load protection function

Pulse field output mode control distribution module:

Under the control of the CPU intelligent control unit, the pulse electric field power module shall be controlled to output the electric field according to the program mode, and the voltage, current, electric field angle, and electric field duration of the controlled pulse field is output to The pulsed electric field required for the experiment is formed on the specific sub-electrode pair of the pulsed electrophoresis tank.

Pulse electrophoresis tank module:

Supplied with pulse field electrophoresis electrodes with at least 3 independent sub electrodes. Tank volume of minimum 3000 ml or better

Ability to control the buffer cooling cycle

Constant temperature circulator:

Must be supplied with The built-in buffer refrigeration circulation pump that can effectively control the electrophoresis temperature

Suitable for the detection and separation of DNA molecules of 100bp-6Mb size

Isolated fragment: 100bp-6Mb Voltage gradient or better: 9.5V/cm max, 0.1V/cm increments or better

Pulse angle: ±120°, ±180°, with field inversion function or better

Pulse width: 1 to 9999 seconds of fixed pulse or 1 to 20 seconds of linear incremental pulse or better

Temperature range: 10°C~30°C, error <±0.5°C or better

Temperature detection: direct detection of buffer temperature, error <±0.1°C or better

Must be provided with minimum gel area of 120x120 mm or more

Sample throughput: minimum 13 teeth (2.0 mm thick) or more

Must be Supplied with electrophoresis apparatus, tank, controller and circulator.

Note: The system must be complete with all parts; required calibrators / standards / reference materials; and accessories including Cables, Leads, Sensors, Probes or any other accessory required for measuring all above selected parameters.

Installation: Complete setup of machine and demonstration about operation and key features.

Model Name, Manufacturer Name & Country of Origin: Must be fill in BOQ Structure of Bidder – Technical Specifications Compliance, Lot-wise (Technical Section)

User and Technical Training: Application training for end user at installation site **Accessories:**

Operation & Service manual (Book & CD) 1 set/each (with permanent Service Password / Key)

If required for operation, provide Compatible PC with 24-inch monitor with laser jet Printer, otherwise other compatible printer for printing the recorded results.

Power requirement: 180-240 VA /50-60 Hz.

Regulatory Compliance:

Must meet all CIE, ASTM and USP color measurement guidelines.

Offered model must be FDA / (CE) or equivalent /MHLW Approved. (Attach Certificate)

Manufacturer should have ISO-9001/ISO-13485/TUV /other Equivalent Certification. (Attach Certificate)