

BIDDING DOCUMENTS

Bid Opening Date 30-12-2022 Bid Receive Time 11:00 AM Bid Opening Time 11:30 AM

DISCLAIMER

- 1. This request for proposals document ("**Bidding Documents**") has been prepared by the Punjab Food Authority (as the Procuring Agency). The Bidding Documents constitute no commitment on the part of the Procuring Agency to enter into any arrangements with any Bidder in respect of procurement of goods under the Bidding Documents or otherwise.
- 2. The information contained in the Bidding Documents or as may be subsequently provided to the Bidders (in documentary or any other form) by or on behalf of the Procuring Agency, with respect to the procurement process being conducted pursuant to the Bidding Documents, are indicative only and are provided solely to assist in a preliminary assessment of the proposed procurement. Moreover, each Bid (comprising the technical proposal and financial proposal) shall be evaluated in accordance with the prescribed technical and financial criteria (as the case may be) provided in the Bidding Documents.
- 3. The Bidding Documents do not constitute an agreement. The purpose of the Bidding Documents is to provide proposed Bidders with information that may be useful for them in preparing their Bids pursuant to the Bidding Documents.
- 4. The Bidding Documents may not be appropriate for all interested parties and it is not possible for the Procuring Agency to consider the objectives and particular needs of each interested party which reads or uses the Bidding Documents.
- 5. The assumptions, assessments, statements and information contained in these Bidding Documents may not be complete, accurate and adequate or correct for the purposes of any or all interested parties.
- 6. Each proposed Bidder is required to conduct its own due investigation and analysis, check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in these Bidding Documents and seek independent professional advice on any or all aspects of these Bidding Documents, as deemed appropriate. The Procuring Agency is not under obligation to consider any such advice or opinion.
- 7. All information submitted in response to the Bidding Documents becomes the property of the Procuring Agency, including all business information and proprietary data submitted with all rights of communication and disclosures, subject to applicable laws in Pakistan.
- 8. No decision shall be based solely on the basis of the information provided for any statements, opinions or information provided in the Bidding Documents.
- 9. While submitting a Bid in response to these Bidding Documents, each Bidder certifies that it understands, accepts and agrees to the disclaimers set forth herein.
- 10. Nothing contained in any provision of these Bidding Documents or any statements made orally or in writing by the Bidders/Contractor shall have the effect of negating or suspending any of the disclaimers set forth herein.

INVITATION TO BID

The Punjab Food Authority ("**PFA**" or the "**Procuring Agency**"), a statutory body constituted pursuant to section 3 of the Punjab Food Authority Act, 2011 ("**PFA Act**"), has been working as a functional entity in Punjab across all 36 districts, since July 2012. Specialized wings "Resource and Licensing", "Technical" and "Operations" which are functional and working to enforce the food hygiene and quality standards as described in the PFA Act and the Pure Food Rules 2011("**PFR**"). PFA's activities in terms of the PFA Act read with PFR are carried out through qualified teams of Food Safety Officers and Assistant Food Safety Officers. Food safety teams ensure the food safety. PFA has state of the art labs working round the clock which carry out the food testing for food hygiene and food adulteration under the supervision of the qualified staff.

Pursuant to the requirements of Rule 12 of the Punjab Procurement Rules 2014 (as amended from time to time) ("**PPR**"), the Bidding Documents have been uploaded on PPRA's (<u>www.ppra.punjab.gov.pk</u>) and Procuring Agency's (<u>www.pfa.gop.pk</u>) websites, and have also been advertised in print media.

The Bidding Documents can be downloaded from the aforementioned websites. Bidders are required to submit deposit slip of Rs. 2,000/- (to be deposited in bank account no. "**PK84ABPA0010043565200023**", Allied Bank Limited having title "**Punjab Food Authority**" and NTN: 9021314-2) along with their Bids, failing which the Bid shall be rejected.

The Bids must reach (by hand) in the office of Assistant Director (Procurement), Punjab Food Authority located at 83-C New Muslim Town Lahore on or before December 30, 2022 till 11:00 A.M.

Technical Proposals shall be opened by the Procurement Committee on the same day at 11:30 A.M. in the office of Director General, Punjab Food Authority (Committee Room), in the presence of Bidders or their authorized representatives having valid authority letters. Late Bids i.e., Bids received after the Bid Submission Date shall be rejected.

All Bids shall be prepared in accordance with the requirements set out in the Bidding Documents and must be accompanied by a Bid Security in the form of a Demand Draft / Pay Order / Call Deposit Receipt of 2% of the "Estimated Cost" of quoted Items cumulatively, in favor of the "Director General Punjab Food Authority Lahore", issued as per the Bidding Documents.

In terms of Rule 38(2)(a) of Punjab Procurement Rules, single stage two envelopes bidding procedure, has been adopted. The Bid shall be a single package consisting of two separate envelopes, containing separately the financial and the technical proposals. The envelopes shall be marked as **Technical Proposal** and **Financial Proposal**. In the first instance, the "Technical Proposal" shall be opened and the envelope marked as "Financial Proposal" shall be retained unopened in the custody of the Procuring Agency. After the evaluation and approval of the Technical Proposals, the Procuring Agency shall open the Financial Proposals of the technically accepted Bidders, publicly at a time, date and venue announced and communicated to the Bidders in advance, within the Bid validity period.

The Procuring Agency reserves the right to accept or reject all Bids received, at any time during the bidding process.

ASSISTANT DIRECTOR PROCUREMENT PUNJAB FOOD AUTHORITY, GOVERNMENT OF PUNJAB

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1. INSTRUCTIONS TO BIDDERS

1.1.Definitions

In the Bidding Documents, unless there is anything repugnant in the subject or context:

- 1.1.1. "ADP" means Annual Development Program;
- 1.1.2. "Agreement" means the ADP Scheme to be entered into between the Procuring Agency and the Contractor for the procurement of relevant Items, attached as annexure A of the Bidding Documents;
- 1.1.3. "Agreement Price" means the price payable to the Contractor under the Agreement for the full and proper performance of its contractual obligations;
- 1.1.4. "Bid" means the proposal (constituting the Technical Proposal and Financial Proposal) submitted by a Bidder in response to the Bidding Documents;
- 1.1.5. "Bidder" means a person who has submitted a Bid in response to the Bidding Documents;
- 1.1.6. "Bidding Documents" means these bidding documents (including the ADP Scheme Agreement) issued by the Procuring Agency for the procurement of Items;
- 1.1.7. "Bid Price" means the total price (inclusive of all applicable taxes) of the relevant Item quoted by the Bidder Bid;
- 1.1.8. "Bid Security" means security submitted by a Bidder in the form of Demand Draft / Pay Order / Call Deposit Receipt, with Technical Proposal to secure the obligations of the Bidder;
- 1.1.9. "Contractor" means the successful bidder, with whom the Agreement is executed a person, firm, company or an organization who or which undertakes to supply goods and services;
- 1.1.10. "Day" means a calendar day;
- 1.1.11. "Effective Date" has the meaning given to it in the Agreement;
- 1.1.12. "Estimated Cost" means estimated cost of an Item, as specified in clause 2 of the Bidding Documents:
- 1.1.13. "Financial Proposal" means the financial proposal submitted by the Bidder, containing rates / prices in respect of the relevant Items in respect of which the Bid is submitted, as per the requirements of the Bidding Documents;
- 1.1.14. "Force Majeure" has the meaning given to it in the Agreement;

- 1.1.15. "Inspection Committee" means a committee notified by Procuring Agency for inspections of Items;
- 1.1.16. "Instructions to Bidders" means the instructions to bidders set out in clause 1 of the Bidding Documents;
- 1.1.17. "Items" means goods (including any relevant services) as specified in clause 2 to be procured by the Procuring Agency;
- 1.1.18. "Letter of Acceptance" means a letter which is issued by Procuring Agency to the Lowest Evaluated Bidder, as per the requirements of the Bidding Documents;
- 1.1.19. "Lowest Evaluated Bid" means a Bid most closely conforming to evaluation criteria and other conditions specified in the Bidding Documents and having lowest evaluated cost;
- 1.1.20. "Lowest Evaluated Bidder" means a Bidder who has submitted the Lowest Evaluated Bid;
- 1.1.21. "Performance Guarantee" has the meaning given to it in the Agreement;
- 1.1.22. "Procurement Committee" means a committee constituted by the Procuring Agency to evaluate Bids in accordance with the requirements of the Bidding Documents and PPR;
- 1.1.23. "PPRA" means Punjab Procurement Regulatory Authority;
- 1.1.24. "PPR" means Punjab Procurement Rules 2014 amended up till date;
- 1.1.25. 'Procuring Agency" means the Punjab Food Authority, constituted under section 3 of the Punjab Food Authority Act, 2011 (as amended from time to time);
- 1.1.26. "Purchase Order" has the meaning given to it in the Agreement;
- 1.1.27. "Specifications" means the specification of each Item, as set out in clause 2 of the Bidding Documents;
- 1.1.28. "Technical Bid Evaluation Criteria" means the criteria specified in clause 1.15, for the evaluation of Technical Proposals;
- 1.1.29. "Technical Proposal" means the technical proposal submitted by the Bidder containing complete information and specification in respect of the relevant Items in respect of which the Bid is submitted, as per the requirements of the Bidding Documents;
- 1.1.30. "Technically Qualified Bidder" means Bidder who, in the opinion of the Procurement Committee, fulfills the Technical Bid Evaluation Criteria, as per the requirements specified therein; and

1.1.31. "Term" has the meaning given to it in the Agreement.

1.2.Bid Scope

- 1.2.1. The Procuring Agency invites Bids for the provision of Items.
- 1.2.2. Bids shall comprise complete information in the Technical Proposals corresponding with the Technical Bid Evaluation Criteria and Financial Proposal corresponding to the rates specified in the Specifications.
- 1.2.3. A Bidder may submit Bid with respect to only one Item or for all or more than one Item, subject to fulfilling the conditions laid down in the Bidding Documents.

1.3. Delivery Schedule

- 1.3.1. The Contractor shall be liable to deliver Item(s) within the timelines specified in the Purchase Order.
- 1.3.2. In case of any delay, late delivery charges @ 0.067% of the total cost of the relevant Purchase Order shall be levied every day beyond the stipulated time of delivery, subject to maximum 10% of the cost of relevant Purchase Order.
- 1.3.3. Days will be counted immediately from Effective Date of signing of the Agreement.

1.4. Eligibility Criteria

A Bidder must:

- 1.4.1. be registered with sales tax and income tax department. In this respect, Bidder must submit copies of NTN Certificate and sales tax certificate GST/PST);
- 1.4.2. provide professional tax certificate-2022-23 with challan form;
- 1.4.3. submit an undertaking on a valid and attested E-stamp Paper of PKR 200/- stating that the Bidder is neither blacklisted nor debarred from participating in any public procurement process of any Provincial or Federal Government Department, Agency, Authority, Organization or autonomous/local body anywhere in Pakistan; and
- 1.4.4. conform to the requirements specified in clause 1.15 (Determination of Responsiveness of the Bidder).

Note: Verifiable documentary proof for all above requirements is a mandatory requirement, non-compliance of which shall lead to disqualification of Bidder.

Technical Proposals shall be evaluated as per the Technical Bid Evaluation Criteria. The Financial Proposals of the technically qualified Bidders i.e., Bidders who achieve minimum technical qualification marks, shall be evaluated as per the requirements set out herein.

1.5. Joint Venture

1.5.1. Joint venture is not eligible for this Bid.

1.6. Amendment of the Bidding Documents

- 1.6.1. The Procuring Agency may, at any time prior to the deadline for submission of Bids, at its own initiative or in response to a clarification requested by the Bidder(s), amend the Bidding Documents, on any account, for any reason. All amendment(s) shall be part of the Bidding Documents and binding on the Bidder(s).
- 1.6.2. The Procuring Agency shall notify the amendment(s) in writing to the prospective Bidders as per PPR.
- 1.6.3. The Procuring Agency may, at its exclusive discretion, amend the Bidding Documents to extend the deadline for the submission of the Bid in light of rule-25(4) of PPR.
- 1.6.4. Queries of the Bidders (if any) for seeking clarifications in respect of the Bidding Documents must be received in writing to the Procuring Agency at the address specified in the Invitation to Bid, at least 7 days before Bid submission date. Any query received after the said date shall not be entertained. All queries shall be responded to within due time.

1.7. Preparation and Submission of Bids

- 1.7.1. The Bid and all documents relating to the Bid, exchanged between the Bidder and the Procuring Agency, shall be in English. Any printed literature furnished by the Bidder in another language shall be accompanied by an English translation which shall govern for purposes of interpretation of the Bid.
- 1.7.2. Bids must be properly bound (book bind / tape bind), all required documents be annexed as per clause 1.1.5 (*Determination of Responsiveness of the Bidder*) and with proper page numbers otherwise Bid shall be rejected.
- 1.7.3. Bidding Documents shall contain Financial Proposal proforma, as set out in clause 3 of the Bidding Documents.
- 1.7.4. Bidder shall provide Bid Security, as per provisions of the clause 1.9 (*Bid Security*) of the Bidding Documents.

- 1.7.5. Bidders' authorized representatives are required to affix signatures with official seal on all original and duplicate (copies) documents, annexures, copies, certificates, brochures, literature, drawings, letters, forms and all relevant documents as part of the Bids.
- 1.7.6. In case the last date of submission of Bids is declared as a public holiday by the Government, the next official working day shall be last date of submission of Bids accordingly. The time and venue shall remain the same.
- 1.7.7. The Bidder shall submit Bid which complies with the Bidding Documents. Alternative Bids shall not be considered. The attention of Bidders is drawn to the provisions of these Bidding Documents Clauses regarding "Determination of Responsiveness of the Bidder" and "Rejection/Acceptance of the Bid" for making their Bids substantially responsive to the requirements of the Bidding Documents.
- 1.7.8. It shall be the responsibility of the Bidder that all factors have been investigated and considered while submitting the Bid and no claim whatsoever including those of financial adjustments to the Agreement awarded under this bidding process shall be entertained by the Procuring Agency. Neither any time schedule, nor financial adjustments arising thereof shall be permitted on account of failure by the Bidder.
- 1.7.9. It must clearly be understood that the terms and conditions and specifications are intended to be strictly enforced. No escalation/de-escalation (price fluctuations) shall be accepted/applicable on the approved rates.
- 1.7.10. No extra charges on account of delivery, loading/unloading etc. or any other excuse shall be paid to the Contractor.
- 1.7.11. Bidders shall enclose brochure as well as catalogues/leaflets/literature and other technical documentary proof of imported Item(s) (if any).
- 1.7.12. Bidders are also required to state, in their Bids, the name, title, contact number (landline, mobile), fax number and e-mail address of the Bidder's authorized representative through whom all communications shall be directed until the process has been completed or terminated.

1.8.Bid Price

- 1.8.1. Bid Price shall be inclusive of all taxes and details on the prescribed proforma of Financial Proposal duly signed and stamped by Bidder on each page along with the covering letter of the Bidder on letterhead of the Bidder.
- 1.8.2. Bid Price shall include all charges up to the delivery and / or installation points (as the case may be) at Punjab Food Authority Office(s).

- 1.8.3. Bidders are bound to give their lowest rational Item wise rates inclusive of all taxes and Financial Proposal shall be evaluated on the basis of Item-wise rate.
- 1.8.4. Bidders are bound to submit genuine offers after fulfilling the requirements of the Bidding Documents. Incomplete and false information shall lead to rejection of the Bids and may result in blacklisting of the Bidder and forfeiture of the Bid Security.
- 1.8.5. Bidders shall submit their rates as per specification(s)/samples/standards or equivalent, acceptable to Procuring Agency.
- 1.8.6. Bidders shall fill up the proforma of Financial Proposal provided in the Bidding Documents.
- 1.8.7. Prices quoted by the Bidders shall be fixed during the Term and not subject to variation on any account. A Bid submitted with an adjustable price/optional quotation shall be treated as non-responsive and therefore will be rejected.

1.9.Bid Security

- 1.9.1. A Bidder shall furnish the Bid Security as mentioned in Bidding Documents with following conditions:
- 1.9.1.1. Denominated in Pak Rupees.
- 1.9.1.2. Amount of Bid Security shall be 2% of the Estimated Cost of quoted Item(s).
- 1.9.1.3. Bid Security shall be calculated against each Item. In case Bidder Bids for more than one Item, the Bidder may furnish Bid Security cumulatively for all Items quoted in the form of one security.
- 1.9.1.4. Bid Security shall be submitted as part of Technical Proposal, failing which the Bid shall be rejected.
- 1.9.1.5. In the form of Demand Draft / Pay Order / Call Deposit Receipt, in the name of the Director General Punjab Food Authority.
- 1.9.2. Bid Security of the Lowest Evaluated Bidder shall be retained by the Procuring Agency until furnishing of the Performance Guarantee.
- 1.9.3. The Bid Security shall be forfeited by the Procuring Agency, on the occurrence of any of the following conditions:
- 1.9.3.1. If the Bidder withdraws it's Bid during the period of the Bid validity.

- 1.9.3.2. If the Bidder, having been notified of the acceptance of the Bid by the Procuring Agency during the period of the Bid validity, fails or refuses to furnish the Performance Guarantee, in accordance with the Bidding Documents.
- 1.9.3.3. If the Lowest Evaluated Bidder to whom letter of award has been issued, fails to sign the Agreement within the stipulated time.
 - 1.9.4. The Bid Security shall be returned to the technically unsuccessful Bidder with unopened / sealed Financial Proposal.

1.10. Bid Validity

- 1.10.1. Bids shall remain valid for a period of 180 days after the date of opening of Technical Proposals.
- 1.10.2. The Procuring Agency may solicit the Bidder's consent for an extension of the validity period of the Bid. The request and the response there-to shall be made in writing. If the Bidder agrees to extension of validity period of the Bid, the validity period of the Bid Security shall also be suitably extended. The Bidder may refuse extension of validity period of the Bid and Bidder is allowed to withdraw the Bid without forfeiture of the Bid Security under rule 28 of PPR.

1.11. Withdrawal of the Bid

- 1.11.1. A Bidder may, by written notice served on the Procuring Agency, modify or withdraw the Bid after submission of the Bid, prior to the deadline for submission of the Bids.
- 1.11.2. A Bid, withdrawn after the deadline for submission of the Bids and prior to the expiration of the period of the Bid validity, shall result in forfeiture of the Bid Security.

1.12. Opening of the Bid

- 1.12.1. Technical Proposals shall be opened at 11:30 AM on the last date of submission of Bids in the presence of Procurement Committee and the Bidders shall ensure presence of themselves or their authorized representatives as per provision of rule-30 of PPR.
- 1.12.2. In case the last date of submission of Bids is declared as a public holiday by the Government, the next official working day shall be last date of submission of Bids accordingly. The time and venue shall remain the same.

1.13. Clarification of the Bid

Under rule-33 of PPR:

1.13.1. The Procuring Agency may, if necessary, after the opening of the Bids, seek and accept such clarifications of the Bid that do not change the substance of the Bid.

- 1.13.2. No Bidder shall be allowed to alter or modify its Bid after the closing time for the submission of the Bids.
- 1.13.3. Any request for clarification in the Bid, made by the Procuring Agency and its response, shall invariably be in writing.

1.14. Qualification and Evaluation of Bids

- 1.14.1. The Procuring Agency will determine, to its satisfaction, whether a Bidder is qualified to perform the obligations set out in the Agreement satisfactorily, and in accordance with the evaluation criteria prescribed in the Bidding Documents.
- 1.14.2. The determination will take into account Bidder's financial and technical capabilities as per the requirements of the Bidding Documents. It will be based upon an examination of the documentary evidence of the Bidder qualifications submitted by the Bidders.
- 1.14.3. The Procuring Agency will technically evaluate and compare the Bids, which have been determined to be substantially responsive, as per the requirements of the Bidding Documents.
- 1.14.4. Technically Qualified Bidder shall be intimated accordingly, and the technically disqualified / non-responsive Bidder may collect its Financial Proposal subject to submitting an application to Procuring Agency with the contents that it is satisfied with the technical results announced by Procuring Agency and it has no obligation with respect to the bidding process conducted pursuant to the Bidding Documents.
- 1.14.5. Procuring Agency may consider a single Bid, if it is responsive as per Rule 55 of PPR.

1.15. Determination of Responsiveness of the Bidder

1.15.1. Firstly, Technical Proposals shall be evaluated by the Procurement Committee in the light of following Technical Bid Evaluation Criteria:

Т	ECHNICAL BID EVALUATION CRITERIA FOR MEI (ALL DOCUMENTS ARE		EQUIPMENT
Sr.	Description	Marks (To be filled in by the Procuring Agency)	Supporting Annexure
1.	Valid Income Tax Registration Number (Status Active with FBR)	Mandatory	
2.	Valid GST/PST Registration Number (Status Active) 100% Compliance	Mandatory	
3.	Submission of undertaking on valid and attested E-stamp Paper of Rs.200/- that the Bidder is neither blacklisted nor debarred by any of provincial or Federal Government Department, Authority, Agency, Organization or autonomous/Local body anywhere in Pakistan NOTE: old yellow-colored Stamp papers are not accepted	Mandatory	
4.	The firm should have a Valid DRAP License for devices (Drug Regulatory Authority of Pakistan)	Mandatory	
5.	Professional Tax Certificate 2022-23 Must be With Challan Form	Mandatory	
6.	Income Tax Returns for Last 3 years "01-07-2019 to 30-06-2022" (Returns must be provided)	If provided for 3 years then 10 Marks. Less than 3 years then 0 marks	
7.	Years of establishment (From Registration date of NTN)	Maximum 5 Marks 1 Mark for each year	
8.	Relevant Experience - Sale/Supply of related items/ Equipment/ goods/ services in any Govt. Department/Autonomous body. (Provide work order with Values)	Maximum 25 Marks 1 mark for sale of One Million PKR-	
9.	Financial Worth: Bank Statement from 01-09-2021 to 30-11-2022 (Bank Maintenance letter required with average inflow) Average inflow per year $= \left(\frac{\text{total inflow from } 1 - 09 - 2021 \text{ to } 30 - 11 - 2022}{15}\right) \times 12$ 1. average inflow 150 Million and above (30 Marks)	Maximum 30 Marks	

	2. average inflow 100 Million to less than average inflow 150 Million (20 Marks)		
	3. Less than average inflow 100 Million (10		
	Marks)		
	General Experience:		
	5 work orders of general experience with any govt.		
	department/organization or with the registered		
10.	Private companies:	Maximum 20 Marks	
	1. 15 Million and above (4 marks each)	waxiiiuiii 20 warks	
	2. 5 Million to less than 15 Million (2 marks		
	each)		
	3. Less than 5 Million (1 mark each)		
	Human Resource: Work Force / staff Detail (along		
	with CV and CNIC)		
	- 1 Manager (Minimum Qualification		
11.	Master's Degree) (3 Marks)	Maximum 10 Marks	
	- 2 Supervisors (minimum Qualification		
	Bachelor's degree) (1.5 mark each)		
	- 4 support staff (1 Mark each)		

Notes:

- 1. A Bidder obtaining 65% marks in Technical Bid Evaluation Criteria shall be considered as Technically Qualified Bidder for sample inspection. Bidders obtaining less than 65% marks shall be considered as non-responsive.
- 2. The Technically Qualified Bidder shall provide samples of the relevant Item(s) for inspection (where applicable) according to the Specifications on date and time as specified by the Procuring Agency failing which the Bidder shall be disqualified.
- 3. A Bidder shall not be considered as technically qualified, unless the samples of the relevant Item(s) for which Bid has been submitted, are inspected and considered satisfactory and compliant to the requirements of the Bidding Documents by the Inspection Committee. The Financial Proposals of only those Technically Qualified Bidders shall be opened whose samples are inspected (where applicable) and approved by Inspection Committee.
- 4. A Bidder shall provide complete set of requisite information and documents as required in terms of the Bidding Documents (including the Specifications) along with the Bid, otherwise the Bid shall be rejected.
- 5. It is mandatory for Bidders who have worked with private organizations as suppliers or contractors to provide audit report for three years from 01-07-2019 to 30-06-2022 reflecting therein the evidence of maturity of relevant purchase orders/ contracts with private organizations otherwise their Bid shall be considered as non-responsive.

Acknowledgement:

- 1. A Bidder shall provide an acknowledgement and confirmation that:
 - (a) the aforementioned criteria is acceptable to it and that it has no objection for observance of rule-2 (a) (e) and 4 of PPR; and
 - (b) information / documents submitted as part of its Bid are correct, legal and duly signed and stamped on each page.

SIGNATURE AND STAMP BIDDER

	TECHNICAL BID EVALUATION CRITERIA (ALL DOCUMENTS ARE		IERY
Sr.	Description	Marks (To be filled in by the Procuring Agency)	Supporting Annexure
1.	Valid Income Tax Registration Number (Status Active with FBR)	Mandatory	
2.	Valid GST/PST Registration Number (Status Active) 100% Compliance	Mandatory	
3.	Submission of undertaking on valid and attested E-stamp Paper of Rs.200/- that the Bidder is neither blacklisted nor debarred by any of provincial or Federal Government Department, Authority, Agency, Organization or autonomous/Local body anywhere in Pakistan NOTE: old yellow-colored Stamp papers are not accepted	Mandatory	
4.	Professional Tax Certificate 2022-23 Must be With Challan Form	Mandatory	
5.	Income Tax Returns for Last 3 years "01-07-2019 to 30-06-2022" (Returns must be provided)	If provided for 3 years then 10 Marks. Less than 3 years then 0 marks	
6.	Years of establishment (From Registration date of NTN)	Maximum 5 Marks 1 Mark for each year	
7.	Relevant Experience - Sale/Supply of related items/ Equipment/ goods/ services in any Govt. Department/Autonomous body. (Provide work order with Values)	Maximum 25 Marks 1 mark for sale of One Million PKR-	
8.	Financial Worth: Bank Statement from 01-09-2021 to 30-11-2022 (Bank Maintenance letter required with average inflow) Average inflow per year $= \left(\frac{\text{total inflow from } 1 - 09 - 2021 \text{ to } 30 - 11 - 2022}{15}\right) \times 12$ 1. average inflow 50 Million and above (25 Marks)	Maximum 30 Marks	

	2. average inflow 25 Million to less than average inflow 50 Million (20 Marks)		
	3. Less than average inflow 25 Million (10 Marks)		
9.	General Experience: 5 work orders of general experience with any govt. department/organization or with the registered Private companies: 1. 10 Million and above (4 marks each) 2. 5 Million to less than 10 Million (2 marks each) 3. Less than 5 Million (1 mark each)	Maximum 20 Marks	
10.	Human Resource: Work Force / staff Detail (along with CV and CNIC) - 1 Manager (Minimum Qualification	Maximum 10 Marks	

Notes:

- 1. A Bidder obtaining 65% marks in Technical Bid Evaluation Criteria shall be considered as Technically Qualified Bidder for sample inspection. Bidders obtaining less than 65% marks shall be considered as non-responsive.
- 2. The Technically Qualified Bidder shall provide samples of the relevant Item(s) for inspection (where applicable) according to the Specifications on date and time as specified by the Procuring Agency failing which the Bidder shall be disqualified.
- 3. A Bidder shall not be considered as technically qualified, unless the samples of the relevant Item(s) for which Bid has been submitted, are inspected and considered satisfactory and compliant to the requirements of the Bidding Documents by the Inspection Committee. The Financial Proposals of only those Technically Qualified Bidders shall be opened whose samples are inspected (where applicable) and approved by Inspection Committee.
- 4. A Bidder shall provide complete set of requisite information and documents as required in terms of the Bidding Documents (including the Specifications) along with the Bid, otherwise the Bid shall be rejected.
- 5. It is mandatory for Bidders who have worked with private organizations as suppliers or contractors to provide audit report for three years from 01-07-2019 to 30-06-2022 reflecting therein the evidence of maturity of relevant purchase orders/ contracts with private organizations otherwise their Bid shall be considered as non-responsive.

Acknowledgement:

- 2. A Bidder shall provide an acknowledgement and confirmation that:
 - (c) the aforementioned criteria is acceptable to it and that it has no objection for observance of rule-2 (a) (e) and 4 of PPR; and
 - (d) information / documents submitted as part of its Bid are correct, legal and duly signed and stamped on each page.

SIGNATURE AND STAMP BIDDER

1.16. Financial Bid Evaluation Criteria

1.16.1. Financial Proposals of Technically Qualified Bidders after approved inspections (if applicable) shall be evaluated on the basis of least cost method. The Agreement shall be awarded to the Bidder whose Bid is Technically Qualified with approved inspection and has submitted Lowest Evaluated Bid.

1.17. Rejection of the Bid

- 1.17.1. The Procuring Agency may reject all Bids at any time prior to the acceptance under rule-35(1) of PPR.
- 1.17.2. The Procuring Agency shall upon request, communicate to any Bidder, the grounds for rejection of its Bid, but shall not be required to justify those grounds.
- 1.17.3. A Bid shall be rejected if:
 - 1.17.3.1.It is submitted in other than prescribed forms, annexes, schedules, charts, drawings, documents and / or specified mode (as the case may be).
 - 1.17.3.2. It is submitted incomplete, partial, conditional, alternative and / or late.
 - 1.17.3.3.It is subjected to interlineations / cuttings / corrections / erasures / over writing.
 - 1.17.3.4. The Bidder has conflict of interest with the Procuring Agency.
 - 1.17.3.5. The Bidder tries to influence the Bid evaluation / award of Agreement.
 - 1.17.3.6. The Bidder engages in corrupt or fraudulent practices in competing for the Agreement award.
 - 1.17.3.7. The Bidder has been blacklisted by any public or private sector organization, in Pakistan or internationally.
 - 1.17.3.8. The Bidder has been served any legal notices or displeasure letters by any public sector organization (in Pakistan or internationally) on serious failures to provide satisfactory Items.
 - 1.17.3.9. The Bidder has mentioned any financial implication(s) in the Financial Proposal that are in contradiction to the Bidding Documents and Government rules and regulations.
 - 1.17.3.10. There is any discrepancy between Bidding Documents and Bidder's Bid i.e. any non-conformity/inconsistency/informality/irregularity in the Bid.

- 1.17.3.11. Bidder submits any financial conditions as part of its Bid which are not in conformity with Bidding Documents.
- 1.17.3.12. Bidder fails to submit verifiable proofs against the mandatory documents.

NOTE: Bids of participating Bidders shall comprise of complete information as per Technical Bid Evaluation Criteria as well as Proforma of Technical Proposal and Financial Proposal, in case of any cutting in Technical Proposal /Financial Proposal, it shall lead to rejection of Bid. Bids shall be evaluated on Item wise rate and Bidders can quote rates (inclusive of all taxes) against more than one Item subject to fulfilling the conditions laid down in the Bidding Documents but the Bid shall be evaluated on Item wise basis separately.

1.18. Samples and Inspection

- 1.18.1. A Bidder failing to submit sample (where applicable) to meet the required specification(s) and standards, shall be considered technically non-responsive.
- 1.18.2. Procuring Agency reserves the right to claim any sample free of cost for inspection as and when required. Bidder shall be responsible to provide the sample within 7 days after demanding by the Procuring Agency.
- 1.18.3. Inspection of material shall be carried out before final acceptance by the Inspection Committee. However, this shall not bar the Procuring Agency from carrying out inspection at any stage of procurement.
- 1.18.4. Contractor shall be responsible to lift unacceptable/rejected Item(s) at their own cost and shall be bound to provide the standardized, acceptable Item(s) with no time extension within stipulated period of time.
- 1.18.5. The Contractor shall be responsible for free replacement of rejected Item(s) by the Inspection Committee within the stipulated period of time. In case of failure, the Contractor shall be liable to pay the loss of the Procuring Agency.

1.19. Agreement Award Criteria

- 1.19.1. Bids shall be evaluated according to Technical Bid Evaluation Criteria and other requirements specified in the Bidding Documents. Samples of Technically Qualified Bidder(s) shall be inspected by the Inspection Committee (where applicable). In case samples are not according to standards/specification(s) or not received on the specified date, the Bidder(s) shall be considered as non-responsive and their Technical Proposals shall be rejected.
- 1.19.2. Technically Qualified Bidders with approved sample inspection in the light of all preconditions, shall be qualified for opening of Financial Proposals. Agreement shall be awarded to the Lowest Evaluated Bidder after completion of all legal/codal formalities.

Lowest Evaluated Bidder shall be a Technically Qualified Bidder with approved sample inspection and Lowest Evaluated Bid.

NOTE: Lowest Evaluated Bid shall be considered against the Bid Price quoted against each Item. Financial Proposal shall be evaluated against each Item separately. Agreement shall be signed on Item-wise basis.

1.20. Letter of Acceptance

1.20.1. As per provisions of rule-(55) of PPR, the Procuring Agency shall issue the Letter of Acceptance to the successful Bidder, at least after 10 days of announcement of Bid evaluation reports under rule-(37) of PPR.

1.21. Performance Guarantee

- 1.21.1. The successful Bidder, shall furnish Performance Guarantee as under:
- 1.21.1.1. Within 7 days, after issuance of Letter of Acceptance.
- 1.21.1.2. In the form of a bank guarantee, issued by a scheduled bank operating in Pakistan, as per the format provided in the Agreement.
- 1.21.1.3. For a sum equivalent to 10% of the Agreement Price,
- 1.21.1.4. Denominated in Pak Rupees;
- 1.21.2. The requirements with respect to maintenance and release of Performance Guarantee shall be as specified in the Agreement. No other shape or form of Performance Guarantee shall be acceptable with any validity less than the prescribed time period.
- 1.21.3. The Performance Guarantee shall be payable to the Procuring Agency, on occurrence of any of the conditions specified in the Agreement.
- 1.21.4. Failure of the successful Bidder to submit Performance Guarantee within given time period, shall constitute sufficient grounds for the forfeiture of the Bid Security along with other remedies available.

1.22. Redressed of grievances by the Procuring Agency

1.22.1. After announcement of technical evaluation report, 1 day will be given to all Bidders for any kind of grievance related to technical grounds/technical evaluation report as per PPRA circular No. L and M (PPRA) 10-01/2011 Date: 20th May 2019.

- 1.22.2. According to PPRA circular No. L and M(PPRA)10-01/2011 Date: 20th May 2019 "After the lapse of given time between the declaration of technical evaluation report and opening of the Financial Proposal no grievance petition would be entertained concerning the technical qualification of successful bidder".
- 1.22.3. After uploading the financial evaluation report, 10 days will be given according to rule 67(2) of PPR for any kind of grievance regarding financial evaluation report.

1.23. Signing Of Agreement

- 1.23.1. The Procuring Agency will notify the successful Bidder whose Bid has been accepted, the Procuring Agency will send the Bidder the Agreement provided in the Bidding Documents.
- 1.23.2. The Agreement shall be signed within fifteen days of issuance of Letter of Acceptance.

1.24. Payment schedule:

1.24.1. Payment shall be made upon satisfactory delivery of Items as per Purchase Order, and fulfillment of documentary and codal formalities, as per the Agreement.

Note:	Bids	or	any	documents	comprising	the	Bids	received	through	courier	may	not	be
entert	ained												

2. PROFORMA OF TECHNICAL PROPOSAL MEDICAL AND LABORATORY EQUIPMENT

Sr. No.	Name of Equipment	Estimated Quantity (A)	Per Unit Cost (B)	Estimated Cost C=(A*B)	Bid Security D=(C/100*2)
1.	Bio Safety Cabinets 1. Biosafety Cabinet: Type A, class II 2. Filters: Cost effective HEPA filters with efficiency >99.95X at 0.3µm or better with filter life indicator. 3. Average Airflow Velocity: a) Inflow- 90 fpm or better b) Down flow-60fpm or better 4. Fan System: Double blowers for inflow and down flow. Redundant system provides protection in case of fan failure. 5. Lamp: LED 6. Illumination: 800 -1000 lux or better 7. Unit Construction: a) External Dimensions: (W*D*H) 4.5*2.5*2.5 feet or better. b) Internal Work Zone Dimensions: 18 Gauge SS304 or better (4*2*2 feet (w*d*h), c) Multi Piece and joint free autoclavable. 8. Worktable: Removable tabletop and IS304 stainless steel. 9. Main Body: 18guage EG steel with epoxy-polyester antimicrobial powder coating or better. 10. Side Walls: UV absorbing tempered glass 5mm, colorless and transparent or better. 11. Gas, Drain Pan & Water Port: Required 12. Must include User and Service Manuals. 13. Window: Motorized (Paddle drive window) 14. UV germicidal Lamp: 254nm or better. 15. Warranty: 1 year warranty period starts from date of installation.	1	2,500,000	2,500,000	50,000

	16. Origin: USA, Europe/UK, Japan				
	or Canada.				
	ELISA Reader and Washer with				
	Software ELISA Micro-plate/Micro-well				
	Reader:				
	1. Reader must be fully automatic,				
	able to generate standard curve,				
	auto pipetting with variable volume				
	take-up, software operated and				
	programmed for the specific				
	number of micro-wells utilization				
	(one, two or required number of				
	wells can be operated with pre-				
	programmed software.				
	2. Able to support all plate formats U				
	bottom, V bottom and flat bottom				
	48 well & 96 well micro plates and				
	strips.				
	3. PC based system; should also				
	function independently.				
	4. Optical systems: LED lamp/ UV,				
	Xenon flash lamp. 5. Wavelength: Absorbance 190-				
	1100 nm, Accuracy ≤1.0% or 0.010				
2.	from 0.000 to 3.000O.D at 6	1	5,000,000	5,000,000	100,000
	position filters and adjustable			-,,	
	filters.				
	6. Photometric range 0.0-3.5 O.D or				
	better				
	7. Precision: 1.0% or 0.005 O. D from				
	0.0-0.2 O. D or better				
	8. Linearity: ≤1.0% 0.0-2.0 O.D,				
	≤2.0% 0.0-3.0 O.D,				
	9. Filters: 8- position filter wheel, the				
	instrument is delivered with the				
	following standard filters installed:				
	405nm, 420nm, 450nm, 595nm,				
	620nm and 650nm & adjustable				
	wavelengths filters mandatory.				
	10. Calibration plate: 96-well and 48				
	well calibration plate must be				
	calibrated for the wavelength (e.g., 620 nm, 650 nm, 405nm, 420 nm,				
	450 nm, 595nm) & adjustable				
	wavelengths filters.				
	11. Display: High contrast color				
	display or better.				
	anopia, or bottor.				

- **12.Incubator (Optional):** Temperature range from ambient +4°C up to 50°C.
- 13. Detection: Absorbance based.
- **14.** Minimum 3 speed for plate shaking 0-999 sec
- **15.** Read time 6sec at single wavelength, 10sec for dual wavelength.
- 16. Detectors: UV and Visible
- **17. Programs:** Specific analyte detection, quantification according to IU from optical density in various food samples.
- 18.USB interface with PC/laptop data station for data output.
- **19.** Should store protocols up to 80-100.
- **20.** System with software package, allowing turbidimetric, colorimetric analysis, report analysis for raw data, absorbance, limit, matrix, normalization and curve fit.
- **21.** Software suitable for template creation for microplates format 1536 wells.
- **22.** Software should be license free or license for minimum 5 systems should be provided.

ELISA WASHER:

- **23.** Fully automatic plate washer with IVD specifications.
- **24.** Programmable and compatible with ELISA reader supplied. Auto pipetting with variable volume take-up, software operated and programmed for the specific number of micro-wells utilization (one, two or required number of wells can be operated with preprogrammed software. Programable needle positions horizontal or vertical to accuracy of 0.1mm for bottom washing, cross wise aspiration and overflow washing.
- **25. Capability:** Washing of 96 well micro-plates and strips, with flat, round, U or "V" bottom well.

		Ī		!	İ
	26. Residual volume: < 4-6 μl				
	27.Tray: Must provide tray for 96				
	wells and 48 wells.				
	28. Discard Tray: Required				
	29. Up to 70 programmable washing				
	sequences				
	30. Wash bottle volume up to 1500 to				
	2000mL				
	31. Soak time for strip 0-10 sec and for				
	plate up to 0-50minutes or better.				
	32. Software able to store 100 washing				
	protocols or better.				
	33. Must include User and Service				
	Manuals				
	34.UPS: At least 2KVA or compatible				
	UPS as required for functioning of				
	the equipment.				
	35. Training: The supplier must be				
	responsible to carry out successful				
	Installation, functionalization of				
	the system and training of 2				
	technical personnel till customer				
	satisfaction at the laboratory				
	premises.				
	36. Warranty with parts: At least One				
	year preferably longer, Warranty				
	will start from the date of				
	installation.				
	37. Origin: USA, Europe/UK, Japan or Canada				
	Fume Hood				
	Must include multi-purpose, inclined				
	front, open sash alarm, control				
	element, monitoring by camera, sash				
	controller/foot switch for sash, fuse				
	box, glove & paper towel dispenser,				
	function Display, Keyboard extension,				
	and container for consumables.				
	1. Type: Universal				
3.	2. Material/Surface:				
٥.	a)Worktop: Polypropylene,	1	3,000,000	3,000,000	60,000
	Stainless steel, Epoxy,			0,000,000	30,000
	Stoneware or better				
	b) Internal Lining: Melamine				
	resin facing, Solid grade				
	laminate, Stoneware or better.				
	3. Nominal Size (W x D x H): 8ft				
	(4.5*3*8) or better				
	4. Fluorescent Lighting System:				
	Pre-wired hood with electronic				

	ballast and instant energy or			
	better.			
5.	Controller: Sentinel™ XL			
·.	Microprocessor, Rocket			
	Switches (Default) or better			
6.	Ventilation: Variable airflow			
•	controller AC or better			
7.	Construction:			
	a) Main Body: Electro			
	galvanized steel with epoxy-			
	polyester hybrid Isocide™			
	Powder coating or better.			
	b) Internal Liner: Resinate TM ,			
	Malamine Resin Facing, solid			
	grade laminate or better			
	c) Worktop: Phenolic Resin,			
	stoneware, glass, epoxy or			
	better.			
8.	Sash Material: Laminated-			
	Tempered and Framed Safety			
	Glass or better			
;	a) Sash Configuration: Vertical			
	or Combination			
1	b) Sash Opening: 1.5 feet or			
	better			
9.	Sanitary supply: Take off valves			
	for vacuum, gases,			
	liquids/water, and integrated			
	sink.			
10.	Fluorescent Light Intensity:			
	900 lux or better			
11.	Exhaust Duct: Must include for			
	proper functioning			
12.	Exhaust Volume/Static			
	Pressure: Face Velocity: 0.5m/s			
	or better			
13.	Exhaust Duct Diameter: 12" or			
	better			
14.	Number of Exhaust Collar: 2 or			
	better			
15.	3			
	provide all necessary venting			
	and ducting accessories for the			
	proper functioning of fume			
	hood. Must include User and			
	Service Manuals			
16.	2 -			
	One year preferably longer,			
	Warranty will start from the date			
	of installation.	1		

	 17. Origin: USA, Europe/UK, Japan or Canada Gerber Centrifuge 1. Capacity: Minimum 08 				
4.	Butyrometers or better. 2. RPM: At least 1100 rpm or better speed (may be increased and controlled). 3. Display: Digital Display with stainless steel kettle. 4. Electronic countdown timer: Required. 5. Automatic lid bolting with Safety locks on the lid. Automatic brake and automatic shutdown in case of emergency. 6. Noise should be less than 50 db. 7. Accessories: Must includes: Must include User and Service Manuals 24 No's. of Butyrometer Tubes along with safety S.S. locks with key. 02 Butyrometer Stands 8. UPS: Suitable Ups required for proper functioning. 9. Warranty: 1 year warranty period starts from date of installation. 10. Origin: USA, Europe/UK, Japan or Canada	2	700,000	1,400,000	28,000
5.	Homogenizer/Laboratory Blender (Black and Dekker, Panasonic, Annex, Moulinex or equivalent). 1. Juice+ Blend+ Grind 2. Jar Material Type Glass 3. Type of Juicer: Centrifugal Juicer 4. 1.5L Juice Jug, 2.0L Pulp Container (Black and Dekker, Panasonic, Annex, Moulinex or equivalent).	1	994,500	994,500	19,890
6.	 Incubator (Hot & Cool) Capacity/Volume: 150-200 liters or better Interior: Stainless Steel ASTM 304 grade Exterior: Textured Stainless-Steel (Electropolished) 	1	2,106,000	2,106,000	42,120

	4 Door operated in suletime 1	ĺ	ĺ		1
	4. Door operated insulation lamp.				
	Outer front door wall insulated				
	and fitted.				
	5. Temperature controller by				
	microprocessor digital				
	temperature indicator and				
	controller.				
	6. Display: Touch screen/Touch Pad				
	with wide display.				
	7. Control: Software required to				
	operate the various programs and				
	must include safety features and				
	alarms in case of errors.				
	8. High density PUF insulation along				
	with Peltier Technology.				
	9. Vertical and easy to move.				
	10. Must include User and Service				
	Manuals.				
	11. Temperature Range: up to +70°C				
	or better				
	12. Max number of grids : 4 or better				
	13. Automatic voltage stabilizer				
	14. Warranty: 1 year warranty period				
	starts from date of installation.				
	15. Origin: USA, Europe/UK, Japan				
	or Canada				
	Microwave Oven (Dawlance, Philips,				
	Haier, PEL and Annex or				
	equivalent.)				
	1. General Requirement: The				
	microwave oven shall be simple in				
	operation.				
	2. Capable in microwave cooking and				
	defrosting.				
	3. Power Consumption: 1300W				
7.	approx. 4. Microwave Power: 700W - 850W	2	E0 000		
		4	50,000	100,000	2,000
	6. Microwave Frequency: 2450 MHz7. Control: Soft/one touch control				
	9. Accessories: Shall be supplied				
	with a glass/ceramic tray.				
	10. Warranty: 1 year warranty period starts from date of installation.				
	11. Origin: USA, Europe/UK, Japan				
	or Canada				
	Shakers (Orbital)				
8.	1. Speed Control: ±1rpm or better	4	760 500		
	2. Timer: 0.1-99.9 hours or better	1	760,500	760,500	15,210
	3. Alarms: Audible & Visual				
	<u> </u>				

4. Drive Mechanism: triple eccentric counterbalanced drive 5. Type: Benchtop 6. Motor Type: Brushless, Solistate 7. Speed Range: 25-500rpm of better 8. Agitation: Orbital 9. Accessories: Platform-Dedicate stainless steel, Utility tray with non-skid rubber surface. Musinclude User and Service Manuals. 10. Training: Required at Laborator Premises 11. Warranty with parts: At least One year preferably longer Warranty will start from the date of installation. 12. Origin: USA, Europe/UK, Japan or Canada	d d h ttee y tt ; e			
Automatic Fat Analyzer (VELP, FOSS, Buchi or Equivalent) 1. Sample Positions: Minimum positions or better 2. Sample Volume (Size): 0.5 to 5gr or better 3. Accuracy: ± 1% 4. Solvent Recovery: 75% or better 5. Temperature Range: 100°C 300°C or better. 6. Other Features: Shall be completely microprocessor based fully automatic boiling, rinsing drying, recovery, lifting of thimble to cooling position and shutdown 7. Software: User interface for up gradation of software 8. Shall be based on official 'Soxhle method and 'RANDALL' metho accepted by AOAC. 9. System must have capability to perform un-attended operation must be programmable an includes saved programs. 10. Safety Features and alarms Required a) Automatic door lock and sealing during extraction.	e l, g, s l l l l l l l l l l l l l l l l l l	9,000,000	9,000,000	180,000

		Í	i i	1	
	b) Automatic over- temp.				
	Control/protection facility.				
	c) Equivalent or ATEX classified				
	components for internal exposed				
	valves, IP 65 for other internal				
	electronics, IP55 for Liquid and				
	Dust protection, Pressurized				
	electronics cabinet				
	11. Accessories to be supplied: The				
	system should be supplied with at				
	least.				
	a) 12 aluminum extraction cups				
	(preferably ≥ 150 ml.),				
	b) 24 dozen of suitable cellulose				
	thimbles (preferably 33 Ø x 80 mm)				
	or Filter Bags, at least 6 Viton				
	seals,				
	c) 2 sample trays.				
	d) 1 Kg boiling stones				
	e) 1Kg Celite				
	f) 2 stands for extraction cups				
	g) 2 recovery flask and other required				
	accessories for smooth				
	functioning.				
	h) User manual and service manual				
	must be included				
	12. Training: The supplier must be				
	responsible to carry out successful				
	Installation, functionalization of				
	the system and training of 2				
	technical personnel till customer				
	satisfaction at the laboratory				
	premises.				
	13. Warranty with parts: At least One				
	year preferably longer, Warranty				
	will start from the date of				
	installation.				
	14. Origin: USA, Europe/UK, Japan or				
	Canada				
	UV-visible Spectrophotometer with				
	monitor and printer (Double beam)				
	1. A fully automated				
	spectrophotometer with double beam optics with pre-				
10.	beam optics with pre- programmed applications using	1	6,790,000		
	conventional quartz / glass	1	0,750,000	6,790,000	135,800
	cuvettes with all the required				
	accessories				
	2. Detector: Silicon Photodiode				
	dual detector				

			7	I	I	İ
3.		elength Display and				
		ing: 0.1nm increments or				
1	bette					
4.		relength Range: 190 –1100				
_ ا	nm	-1				
5.		relength Accuracy: ± 0.1nm				
	bette	± 0.3nm entire range or				
6						
6.		relength Repeatability: ± am or better				
7.		nning Speed:				
′ .	i.	3000 to 2nm/min				
	ii.	•				
	11.	29000nm/ min during				
		survey				
8.		ctral Bandwidth: 1nm or				
	bette					
9.		tometric Range:				
		orbance = -4.0 to 4.0 Abs or				
10	bette					
10.		It Source: Built in, auto tion adjustment light source				
	-	W halogen lamp, xenon and				
		terium lamp or better				
11.		e color touch screen				
12.		eline stability: Less than				
12.		003 Abs /hr.				
13.		eline flatness: less than ±				
10.		006 Abs				
14.		tometric Accuracy:				
	i.	± 0.002Abs at 0.5 Abs,				
	ii.	± 0.004 Abs at 1 Abs,				
	iii.	± 0.006 Abs at 2 Abs				
15.		tometric Repeatability:				
13.	i.	less than ± 0.0002Abs at				
	1.					
		0.5 Abs				
	ii.	less than ± 0.0002 Abs				
		at 1 Abs				
	iii.	less than \pm 0.001 Abs at				
		2 Abs				
16.	Stra	y Light:				
	i.	less than 0.02 % at				
		220nm (Nal)				
	ii.	less than 0.02 % at				
		340nm (NaNo2)				
	iii.	less than 0.5 % at				
	111.	198nm (KCl)				
177	A	,				
17.	_	essories and spares:				
	i.	Software compatible pc				
		and printer				
	ii.	Service Manuals and				
		user manuals required				

		iii. One pair each of 0.5, 1				
		and 3-ml quartz cuvettes				
		10 mm path length				
		iv. Cuvette holder				
		v. Deuterium Lamp				
		vi. Halogen lamp				
		vii. Suitable Certified				
		Standards for Validation				
		including Holmium oxide				
		glass filters for				
		_				
		wavelength calibration & NIST traceable				
		Potassium dichromate				
		ix. Must include User and				
	10	Service Manuals				
	18.	-				
	19.	of 2 KVA for proper functioning Training: The supplier must be				
	1).	responsible to carry out				
		successful Installation,				
		functionalization of the system				
		and training of 2 technical				
		personnel till customer				
	20	satisfaction.				
	20.	• •				
		period starts from date of installation.				
	21.					
		or Canada				
	Wate	er Purification System				
	(dei	onizer)				
	1.	Quality of water: Should deliver				
		Type I/Ultra- pure as per				
		international specifications as follows:				
		a) Electrical Resistivity Min.				
		$18.2 \text{ M}\Omega/\text{cm} @ 25^{\circ}\text{C}.$				
		b) Conductivity 0.055µS /cm				
		compensated to 25°C.				
		c) TOC level (system with UV				
11.		lamp) 1 lit / min.		2 = 1		
	2.	Production Capacity: 3L/ Hour	1	2,574,000	2,574,000	51,480
	3.	flow rate Tank Volume: 6L, Built-in			, ,	,
	٥.	reservoir				
	4.	Feed water: Should have				
		separate feed water (Potable tap				
		water) specific purification				
		cartridge and application specific				
	_	polishing cartridge.				
	5.	Controller & Display: Should				
		have calibrated meters for continuous monitoring and LCD				
		display of water quality				
		display of water quality				

	parameters: Product water resistivity/ conductivity both compensated and non-compensated mode, product water temperature, alarms for resistivity greater or below set points. 6. Training: The supplier must be responsible to carry out successful Installation, functionalization of the system and training of 2 technical personnel till customer satisfaction at the laboratory premises. 7. Accessories: a) User Manual and Service Manuals must be included. b) 1 Extra set of filter cartridges required. 8. Warranty with parts: At least One year. Warranty will start from the date of installation. 9. Origin: USA, Europe/UK, Japan or Canada				
12.	 Dual Channel Instrument for measuring ion concentrations, conductivity, salinity, TDS, and resistivity. Resolution: For conductivity 0.001μS/cm to 20000μS /cm Conductivity Calibrators Solution (Low, Medium and High Micro Simons) TDS: Range 1 to 199.9 g/L (TDS) at variable Temperature from 0°C to 100°C Memory: 50 Sets or better. Display: LCD display Accessories: Mandatory to Provide Calibration standards set, user manual and service manuals Warranty: 1 year warranty period starts from date of installation. Origin: USA, Europe/UK, Japan or Canada 	2	500,000	1,000,000	20,000
13.	Flame Photometer (Automatic) 1. Detection of Sodium, Potassium, Calcium (0 to 100ppm) 2. Reproducibility: 0.5% to 1% or better	1	4,500,000	4,500,000	90,000

3. Sensitivity: 0.1 to 0.5 ppm 4. Automation System: Must includes auto-sampler, diluter and mixer. 5. Filters: Provision of filters for sodium, potassium and calcium is mandatory 6. Software: User administration (bull-in software with automatic flame system/gas control). 7. Fuel: LPG or natural gas 8. Safety Feature: system with auto detection of flame failure and ignition system is mandatory. 9. Printing facility along with printer 10. Display: Wide Digital LED 11. Accessories: Mandatory to provide; a) calibration certificates b) calibration certificates c) user manuals & service manuals d) provision of compressors & pressure detectors and cooling system. 12. UPS: Mandatory to provide system compatible UPS. 13. Training: Training to staff regarding method development, usage and complete operation of instrument. 14. Warranty: At least One year, Warranty will start from the date of installation. 15. Origin: USA, Europe/UK, Japan or Canada Melting Point apparatus 1. Automatic Determination of Melting Point apparatus 1. Automatic Determination of Melting point soling point, Cloud Point & Slip Melting Point and up to 2 for boiling, cloud, and slip melting points. 3. Display: High Quality wide color display 4. Optimized Heating Block allows faster cooling times and therefore					1		
includes auto-sampler, diluter and mixer. 5. Filters: Provision of filters for sodium, potassium and calcium is mandatory 6. Software: User administration (built-in software with automatic flame system/gas control). 7. Fuel: LPG or natural gas 8. Safety Feature: system with auto detection of flame failure and ignition system is mandatory. 9. Printing facility along with printer 10. Display: Wide Digital LED 11. Accessories: Mandatory to provide;		3.	Sensitivity: 0.1 to 0.5 ppm				
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4. Optimized Heating Block allows							
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			iaster cooming times and therefore				

				,	
	higher sample throughput per				
	hour.				
	5. Cool-down time (350 °C – 50 °C) ~				
	5.5 min.				
	6. Accessories:				
	Melting Point Capillaries: 3				
	Slip Point capillaries: 2				
	Boiling Point Capillaries: 2				
	Cloud Point Capillaries: 2				
	Mandatory to provide user manual,				
	service manual and all necessary				
	accessories for proper functioning.				
	7. Lens: Easy observation of the				
	melting process through a				
	magnifying lens of 6X or better.				
	8. Temperature Range: Ambient +10				
	to 350°C or better.				
	9. Storage: up-to 50 or better.				
	10. Training: The supplier must be				
	responsible to carry out successful				
	Installation, functionalization of				
	the system and training of 2				
	technical personnel till customer				
	satisfaction at the laboratory				
	premises.				
	11. Warranty with parts: At least One				
	year, Warranty will start from the				
	date of installation.				
	12. Origin: USA, Europe/UK, Japan or				
	Canada				
	Microscope with Camera an analysis				
	Software				
	1. Body: Cast alloy aluminum stand				
	material with anti-reflective, anti-				
	microbial treatment or better.				
	2. Trinocular Microscope , Built-in				
	High-Resolution Camera, Calibrated (Numerical) Eyepiece.				
	3. Observation Mode: Incident				
15.	polarized light/Brightfield or better.	1	2,106,000		
		1	2,100,000	2,106,000	42,120
	4. Head: Trinocular (Fixed, 360°				
	rotating and 30° inclined.				
	Interpupillary distance 48-75mm				
	or better.				
	5. Dioptric Adjustment: On the left				
	eyepiece tube or better.				
	6. Eyepieces: WF10x/20mm, High				
	eye-point and secured by screw or				
	better				

7		Objectives:
		i. 4x/0.10
		ii. 10x/0.25
		iii. 40x/0.65
		iv. 100x/1.25(Oil/Water)
		*All with anti-fungus treatment.
		*Objective must be strain free.
	Q	Nosepiece: Quintuple Revolving
	ο.	nosepiece, rotation on ball
		bearings or better.
	9.	Specimen Stage: Ceramic, hard
		coated and mechanical stage or
		better.
	10). Focusing: Coaxial coarse and fine
		focusing mechanism with limit
		stop to prevent the contact to
		prevent the contact between
		objective and specimen. Adjustable tension of coarse
		focusing knob.
	11	. Condenser: Abbe N.A. 1.25
		swing-out Achromat condenser,
		with objective-coded iris
		diaphragm, focusable, center-able
		and.
	12	2. Illumination (Fixed Koehler
		Type): X-LED with white 3.6W and light intensity control, multi
		plug. Life 10000 to 20000 hours
		or better.
	13	B. Control: Software operated with
		pre-defined and custom
		programable methods.
		. Memory (ROM & RAM):
		b. Display: LED or better.
	16	5. Manual Accessories: Must be
		provided with each microscope.
		i. Working/User manual and
		service manual
		ii. Immersion oil 25 ml x 2
		iii. Lens tissue paper 2 rolls or
		boxes
		iv. Specific paper roll to clean the
		eyepiece/objective lense.
		v. Lens cleaning solution (100
		ml)

vi. One anti-static cleaning

vii. It shall be capable of being stored continuously in ambient temperature of 0 -50°C and relative humidity of 15-90%.

brush.

	17. Digital camera: 20 mega pixel scientific grade or better. 18. Resolution Range: i. at least 5200-5500 x 3500-4000@FPS15 or better ii. 2400-2500 x 1800-2000@FPS53 or better. 19. PC System: Microscope should come along with PC (Core-i7 or better). 20. UPS: Suitable Ups required for proper functioning. 21. Training: Training to staff regarding method development, usage and complete operation of instrument. 22. Warranty: 1 year warranty period starts from date of installation. 23. Origin: USA, Europe/UK, Japan or Canada				
16.	 Construction: Must be Rugged and flexible for all types of lab applications, including heating of metals and drying at high temperatures. Insulation: Multiple layers of high quality, asbestos-free ceramic fiber insulation. Must have the Heating elements safely positioned, covered with ceramic plates. Hinged door designed with parallel forced guidance system hot surface always faces away from user when door is open. Internal chamber capacity: 12 L or better Temperature Range: 1100°C or better Standard Working Temperature: 550°C. Temperature accuracy: ± 1.0 °C Heating rate: The furnace should be of fast heating type with the maximum attainable temperature should reach as a ramp function in less than one hour. 	1	1,638,000	1,638,000	32,760

				1	1
	10. Must have electronic controller:				
	with 24-hour timer and exhaust				
	vent.				
	11. Temp. Uniformity: must be ± 8°C				
	or better.				
	12. Cooling Fan/ Air Circulation:				
	Attached with Furnace, provided				
	inside the control unit to protect				
	Costly component.				
	13. Accessories:				
	i. Protection Glove 4 pairs				
	ii. Crucible Clip 4 pair				
	iii. Crucibles 48 pcs				
	iv. User manual and service				
	manuals				
	14. UPS: Suitable ups required for				
	proper functioning.				
	15. Warranty: 1 year warranty period				
	starts from date of installation.				
	16. Origin: USA, Europe/UK, Japan				
	or Canada				
	Hot Air oven				
	1. Material of Construction:				
	a) Interior: Stainless Steel				
	b) Exterior: Textured Stainless				
	Steel				
	2. Fully insulated stainless steel door				
	with 2 Point locking (Compression				
	door lock).				
	3. Two or more stainless				
	steel electro-polished				
	facility for adjustable				
	shelves, 8-10 removable				
17.	dishes to be provided.				
17.	4. Digital counter with target time	1	2,106,000	2,106,000	42,120
	setting, adjustable from 1 minute			2,100,000	12,120
	to 90 days or better.				
	5. Programmed for three different				
	Temperature values with specific				
	time-period along with 05				
	Maximum Number of Intervals.				
	Program stored in case of power				
	failure.				
	6. Display: LED/TFT				
	7. Safety Alarm: Required				
	8. Volume: 100 - 120L				
	9. Manuals: User and service				
	manuals				
	manuais				

18.	 10. UPS: One Compatible ups required for proper functioning. 11. Warranty with parts: Warranty: 1 year warranty period starts from date of installation. 12. Origin: USA, Europe/UK, Japan or Canada Pipette Sets 1. Fully autoclavable 2. Volume ranges for pipettes with quantity: a) 0.5 10uL b) 10 100uL c) 100 1,000uL 3. Warranty with parts: At least One year preferably longer 4. Origin: USA, Europe/UK, Japan or Canada Tintometer 	2	300,000	600,000	12,000
19.	1. Spectral range: 400-700nm or better 2. Viewing system: Fully adjustable, prismatic with integral blue filter for light standardization. 3. Band width: 10 to 20 nm 4. Path Length: Up to 153 mm (6") or better 5. Storage capacity: Should be 40000 measurements or better 6. Response/measurement Time: Less than 30 seconds. 7. Resolution: 0.1 Lovibond unit 8. Illumination: CIE Illuminant C 9. Color Scales: AOCS, Lovibond, APHA, FAC (Standards for Oil and FAT, beta carotene) 10. Accessories: a) Colorimetry Cells, b) Conformance filters c) Certified color reference standards (representing a range of Lovibond® colors), for quick and simple quality control checks on instruments & operators d) Spare Lamp-02 No's. e) Must include User and Service Manuals	1	6,318,000	6,318,000	126,360

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	11. Repeatability: +/- 0.0002 or				
	better				
	12. Reference Filters: 15 or more				
	13. Calibration: Fully automatic fast				
	self-calibration				
	14. Software along with computer				
	15. Interfaces: USB, LAN & printing				
	facility must be available.				
	16. Training: The supplier must be				
	responsible to carry out				
	successful Installation,				
	functionalization of the system				
	and training of 2 technical				
	personnel till customer				
	satisfaction at the laboratory				
	premises.				
	17. Warranty with parts: At least				
	One year preferably longer, Warranty will start from the date				
	of installation.				
	18. Origin: USA, Europe/UK, Japan				
	or Canada				
	Water bath				
	1. Display: Luminous digital LED				
	2. Interior: Deep-drawn stainless				
	steel without corners and edges				
	3. Exterior: Textured stainless				
	casing				
	4. Cover: Stainless Steel				
	5. No heaters, sensors or other				
	fittings in the bath vessel				
	6. Temperature Range: +5-100°C or better (with cover).				
	7. Temperature fluctuation: 0.1°C				
	8. Temperature Control:				
20.	Temperature limiter to switch-off	2	1,000,000	2,000,000	40,000
	heating in case of failure.	4	1,000,000	2,000,000	40,000
	9. Capacity: 20-25 Liters				
	10. Auto diagnostic system with fault				
	indicator.				
	11. Mandatory to provide calibration				
	certificates				
	12. Timers: Optimize scheduling with				
	auto-on and auto-off timers (1				
	Minutes to 99 Hours or				
	continuous).				
	13. Temperature Stability /				
	Uniformity @ 37°C: ±0.02°C				
	14. Accessories:				

	a) Stainless Steel / Polypropylene				
	Test tube rack for test tubes of				
	variable diameter: 04 No's.				
	b) Trays for Beakers (100 ml and				
	500ml)				
	c) Spring tray/ racks for				
	Erlenmeyer flasks (250/500				
	mL): 04 No's.				
	d) Must include User and Service				
	Manuals				
	13. Warranty with parts: At least One				
	year preferably longer, Warranty				
	will start from the date of				
	installation.				
	14. Origin: USA, Europe/UK, Japan or				
	Canada.				
	UHPLC (Ultra High-Performance				
	Liquid Chromatography)				
	1. The system must have				
	compatibility for both HPLC &				
	UHPLC applications.				
	2. Quaternary Pump:				
	a) Must include integrated vacuum				
	degassing technology, accurate &				
	precise flows, accurate solvent				
	blend.				
	b) Automatic piston seal wash &				
	long seal life required with quick &				
	easy routine maintenance.				
	c) Must have settable flow range of				
	0.001-5ml/min or better.				
	d) Must have Flow Accuracy up to				
	+/-1.0%.				
21.	e) Must have flow precision of	1	32,000,000	32,000,000	640,000
	<0.075% RSD or better.	1	02,000,000	02,000,000	010,000
	f) Must have composition accuracy				
	up to +/-0.5%				
	g) Must have composition precision				
	of $+/-0.15\%$ RSD or better.				
	h) Must have maximum operating				
	pressure of 11000 to 15000 Psi or				
	better.				
	i) Must have Pump Seal Wash as				
	Standard.				
	j) Must have pH Range of 1 to 12.				
	k) Automated Dwell volume				
	selection & integrated vacuum				
	degassing of four chambers.				
	3. Infinity Vial Auto-Sampler				
	a) Must have injection volume				
	range of 0.1ul to 100ul or better.				

b) Must have Sample capacity: 96		
vials or better.		
c) Must have sample compartment		
temp 4-40°C.		
d) Must have temp accuracy +/-		
0.5°C or higher.		
e) Must have sample		
carryover<0.003% or better.		
f) Must include additional		
capabilities Auto-dilution; auto		
addition; load ahead integral,		
active and programmable injection		
needle wash.		
4. Thermostatic Column		
Compartment/Oven (or Equivalent)		
a) Must have temp accuracy of +/-		
0.5°C		
b) Must have temperature stability		
of +/-0.5°C.		
c) Must have temperature range		
8°C (Above ambient) to 80°C or		
better.		
d) Must have Column Capacity up		
to 3 columns with 3 positions		
e) Automatic Column switching		
valve (able to accommodate 4-		
columns).		
5. Photodiode Array Detector		
(HPLC/UHPLC/UPLC capability)		
a) Must have No. of PDA channel:		
800 to 1024 or better		
b) Must have wavelength of 190-		
800nm or better.		
c) Must have drift of <1 * 10-3		
AU/hr. or better.		
d) Must have wavelength accuracy		
up to ±1nm or better.		
e) Must have automatic		
wavelength and photometric		
accuracy, correction check,		
linearity noise level, drift, system		
check.		
f) Must have wavelength source as		
1amp for entire wavelength range.		
g) Light Source: Mandatory to		
provide both deuterium and		
tungsten lamps.		
6. RI Detector:		
a) Light Source: LED; 870nm or		
better.		
b) Refractive Index Range: 1-1.75		
RIU		

c) Measurement Range: 7.0 × 10-9		
RIU to 5.0 × 10-9 RIU		
d) Response: 0.05 to 10 sec. 10		
steps		
e) Flow Cell: Fuse Quartz		
f) Flow Cell Volume: 9uL or better		
g) Zero Point adjustment: Auto		
zero, optical zero, fine zero		
Automatic purge and automatic		
solvent recycle valves should be		
available.		
7. Fluorescence Detector (UHPLC		
Prime Compatibility)		
a) Must have programmable dual		
monochromator rationing detector		
b) Excitation of 200 – 850 nm.		
c) Emission of 250-900 nm		
d) Signal –to- noise must be >300:1		
for Raman of water; 15 or 30 nm,		
slit firmware settable integral 150-		
watt continuous xenon, should		
include:		
e) Xenon source (150 watt), 12 μl,		
Quartz/ Fluororesin Flowcell; Inlet		
and outlet Tubing. Interface for		
Fluorescence Detector to use with		
UHPLC system.		
8. Software:		
a) Complete system with original		
CDS software fully compliant with		
21 CFR part 11 guidelines.		
b) Software must have option to		
multi-vendor system connectivity.		
c) Software must have LIMS / LMS		
support.		
9. Accessories:		
a) For Sugars and Sugar in Honey:		
- Hi-plex H Column		
(7.7mm*300mm*8µm)		
02 No's		
b) For Aflatoxins/Mycotoxins: -		
Zorbax Eclipse-XBD		
C18(4.6mm*150mm*3.5µm and		
C18. 4.6*150, 5µm) (02 Nos.).		
c) For Sudan Dyes 1,2,3,4: - Silica		
Gel C18 (250*4.6mm*5µm)		
02 No's		
d) Exisil Pure 120 RP18;		
(250mm*4.6mm*10µm) 02		
No's		
e) Cation Exchange column		
3.9*150, Sum (IC-PAK or		
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Equivalent)		
01 No.		
f) C18. 4.6*250*5µm		
02 Nos.		
g) C18. 4.6*250*2.7µm		
01 Nos.		
h) C18. 4.6*250*10µm		
01 Nos.		
i) C18. 4.6*250*1.5μm		
01 Nos.		
j) C18. 4.6*150*1.5μm		
01 Nos.		
k) Phenyl XP L11. 4.6*50*2.5µm		
01 Nos.		
l) Phenyl L11-4.6*150*2.5µm		
01Nos.		
m)Phenyl 4.6*250*5µm		
01Nos		
n) C18. 3*100*2.7μm		
01 Nos.		
o) C8.2.1*100*2.7μm		
01 Nos		
p) C4. 50mm*2.1mm*3µm		
01 Nos.		
q) PM Kit for Diode array Detector		
01Nos.		
r) PM Kit for Quaternary Pump		
01 Nos.		
s) 2ml Glass Vial Pre-Slit Septa		
Amber 1000 vials		
t) User and Service Manuals		
included		
u) Tool Kit for all system		
maintenance must be included		
v) Application notes must be		
included regarding sugars,		
artificial sweeteners, Vitamins,		
refractive index, preservatives and		
caffeine determination in food		
samples.		
10. DisQue Quechers (1g		
Trisodium citrate Dihydrate, 0.5g		
Disodium Hydrogencitrate		
Sesquilhyd rate, 1g NaCL and 4g		
MgSO4, 50ml pouch) 100Nos.		
11. SPE cartridges: 3cc, 60mg		
Sorbent per cartridge, 30um		
particle size- Qty; 03 Nos.		
Oasis Prime HLB 3ccVac cartridge,		
150mg Sorbent per cartridge,		
100/pk		
Extra tubing at least 03 sets		
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	18. Solvent Filtration Assembly of				
	PTFA (Sartorius)				
	19. Branded Computer (Core i7)				
	with LED and network laser jet				
	printer and original Microsoft				
	compatible windows.				
	21. UPS: A system compatible				
	UPS along-with voltage stabilizer.				
	22. Training: Training to staff				
	regarding method Development,				
	usage and complete operation of				
	instrument (application)				
	23. Warranty: Warranty at least 1				
	years with all possible library				
	matches related to Food				
	Applications and necessary				
	parts.warranty will start from date				
	of installation.				
	25. Origin: USA, Europe/UK,				
	Japan or Canada				
	PCR (Real-time)				
	1. Reaction volume and Sample				
	capacity (wells): 96-well block: 5-				
	50μL or better.				
	2. Excitation source: Bright white				
	LED or better				
	3. Optical Detection: 96-well: 4 to 8				
	decoupled filters,				
	4. Excitation/Detection range: 96-				
	well: 400–700 nm/490–800 nm				
	5. Multiplexing: 96-well: up to 5-7				
	targets,				
	6. Maximum block ramp rate: 96-				
	well block: 5-8°C/sec or better.				
22.	7. Average sample ramp rate: 3 to	_	10.000.000	10.000.000	2.40.000
	4°C/sec or better	1	12,000,000	12,000,000	240,000
	8. Temperature uniformity: 0.3 to				
	0.5°C or better.				
	9. Compatible dyes:				
	a) TaqMan probe				
	b) FAM/SYBR Green				
	c) VIC/JOE/HEX/TET				
	d) ABY/NED/TAMRA/Cy3				
	e) JUN, ROX/				
	f) Texas Red, Mustang Purple TM				
	g) Cy®5/LIZTM				
	h) Cy®5.5				
	10. Run Time: ≤25-40min runs				
	11. Security, auditing, and e-				
	signature (SAE) features, yes, with				
	no additional fees				
	no additional ices				

12. Including operational		
software		
13. Methods: Software operated		
programs, pre-defined methods,		
and editable user defined methods.		
a) TaqMan probe		
b) FAM/SYBR Green		
c) VIC/JOE/HEX/TET		
d) ABY/NED/TAMRA/Cy3		
e) JUN, ROX/		
Texas Red, Mustang Purple TM		
f) Cy®5/LIZTM		
g) Cy®5.5		
14. Accessories:		
Gel electrophoresis:		
a) Tank: 500mL to 900mL volume,		
samples 16-50,		
b) Dimensions (L x W x H): 8-10 x		
6-8 x 3-5 in.		
c) Gel casting tray: UV		
transmissible with rubber dams		
d) 2 combs:16 -30 wells		
e) Power supply (up to 250-300V,		
2-3 jacks, timer: 0-999 minutes,		
current: 350-400mA, frequency 40-		
50/60-70Hz, Voltage: 120V,		
display: voltage, current and time,		
Dimensions (L x W x H): 10-11 x 5-		
6 x 4.5-5.5 in.		
Trans illuminator:		
a) Wavelength: 302, 312nm or		
better		
b) Light source: blue LED		
c) Image a range of EtBr, gel red,		
gel green and other dyes.		
d) Viewing area (18-20 x 15-18 cm)		
with orange filter.		
e) Voltage: 120-250 V		
f) Must include User and Service		
Manuals		
15. System: Minimum Core-i7		
laptop or better and input or		
output storage		
16. UPS: Mandatory to provide system compatible UPS		
17. Training: The supplier must		
be responsible to carry out		
successful Installation,		
functionalization of the system and		
training of 2 technical personnel		
till customer satisfaction at the		
laboratory premises.		
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	18. Warranty: 1 year warranty					
	period starts from date of					
	installation.					
	19. Origin: USA, Europe/UK,					
	Japan or Canada					
	NIR with supporting UPS					
	1. Instrument UV Vis and UV-Vis					
	NIR Spectrophotometers					
	measurement modes					
	2. Absolute specular reflection at					
	variable angle from 5-85° in 0.02°					
	intervals. Direct transmission and					
	variable angle transmission from 0-					
	90° inn 0.02° intervals diffuse					
	scattering reflection or					
	transmission through independent					
	sample rotation (360°) and detector					
	positioning between 10-350° at					
	0.02° in intervals.					
	3. Absorptance, A where A=1-R-T					
	at variable angle without moving					
	the sample or beam onto the					
	sample for improved productivity					
	and greater accuracy.					
	Reflection/Transmission at single					
	wavelength (read) or wavelength					
	range (scan) Wavelength range 190-2800 nm					
1 72	4. Customizable and very easy to		1	30,250,000	30,250,000	605,000
	use interface for use for variety of		1	30,230,000	30,230,000	003,000
	food applications.					
	5. Measurement in visible range					
	possible with VIS option.					
_	6. Measurement of solid, liquid					
	samples all possible with one					
	instrument.					
	7. Easy calibration creation &					
	maintenance with AUTOCAL					
	function.					
8	8. Two Sample modes, up view					
	measurement beam from top of					
	sample) and down view					
(measurement view from below					
8	sample) so it can be used for all					
	kinds of food samples					
	9. Wavelength range NIR 900-					
	1700nm, Resolution NIR 7.0nm					
	10. Wavelength range VIS 400-					
	900nm, Resolution VIS 10nm					
	11. Detector NIR					
	Thermoelectrically cooked in gas					
	Detector VIS 5i					

12. Training to Staff regarding Method Development, usage, and Complete Operation of Instrument 13. The supplier must be responsible to carry out successful Installation, functionalization of the system and training of 2 technical personnel till customer satisfaction at the laboratory premises. 14. Warranty: 1 year warranty period starts from date of installation. 15. Origin: USA, Europe/UK, Japan or Canada		
Tota	KR) 133,243,000	
	KR) 2,664,860	

Notes:

- **1-** Evaluation formulated by the Procuring Agency shall be acceptable during whole executing period and supply shall be ensured as per approved sample and design in the procurement criteria.
- **2-** Prices of aforementioned Items must be filled on "**proforma of financial proposal**" and all pages should be duly signed and stamped.
- **3-** Proper required technical specification(s) and brand of all aforementioned Items must be quoted on proforma of Technical Proposal as well as on original letterhead of Bidder, failing which shall lead to disqualification.
- **4-** The quantities given in the Bidding Documents are estimated. The Procuring Agency is not bound to procure all Items as mentioned in the Bidding Documents.
- 5- Import documents shall be verified at the time of delivery of items (where applicable).
- **6-** Traceable Certificate of Analysis/Certificate of Conformance shall be verified at the time of delivery of chemicals.
- **7-** In case of certified reference material, provision of ISO 17034 certificate is mandatory.
- **8-** Bid must be supported with comprehensive technical literature in original and containing complete details of the manufacturer (i.e., official addresses, official website, telephone numbers, E-mail addresses of sales and customer support etc.).

Bidder Signature and Stamp

3. PROFORMA OF FINANCIAL PROPOSAL MEDICAL AND LABORATORY EQUIPMENT

FIRM INFORMATION:		
Name of Firm:	N.T.N:	
Postal/Temporarily Address:		
Permanent Address:		
Phone No.:	GST/PST REG. No:	

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Sr. No.	Name of Equipment	Estimated Quantity (E)	Per Unit Bid Price inclusive of all Taxes (F)	Total Cost with Taxes G=(E*F)
	Bio Safety Cabinets			
1.	 Biosafety Cabinet: Type A, class II Filters: Cost effective HEPA filters with efficiency >99.95X at 0.3μm or better with filter life indicator. Average Airflow Velocity: Inflow- 90 fpm or better Down flow-60fpm or better Fan System: Double blowers for inflow and down flow. Redundant system provides protection in case of fan failure. Lamp: LED Illumination: 800 -1000 lux or better Unit Construction: External Dimensions:	1		

			 <u>, </u>
	8. Worktable: Removable tabletop		
	and IS304 stainless steel.		
	9. Main Body: 18guage EG steel		
	with epoxy–polyester		
	antimicrobial powder coating or		
	better.		
	10. Side Walls: UV absorbing		
	tempered glass 5mm, colorless		
	and transparent or better.		
	11. Gas, Drain Pan & Water Port:		
	Required		
	12. Must include User and Service		
	Manuals.		
	13. Window: Motorized (Paddle drive		
	window)		
	14. UV germicidal Lamp: 254nm or		
	better.		
	15. Warranty: 1 year warranty		
	period starts from date of		
	installation.		
	16. Origin: USA, Europe/UK, Japan		
	or Canada.		
	ELISA Reader and Washer with		
	Software		
	ELISA Micro-plate/Micro-well		
	Reader:		
	1. Reader must be fully automatic,		
	able to generate standard curve,		
	auto pipetting with variable		
	volume take-up, software		
	operated and programmed for		
	the specific number of micro-		
	wells utilization (one, two or		
	required number of wells can be		
	operated with pre-programmed		
2.	software.	1	
	2. Able to support all plate formats		
	U bottom, V bottom and flat		
	bottom 48 well & 96 well micro		
	plates and strips.		
	3. PC based system; should also		
	function independently.		
	4. Optical systems: LED lamp/		
	UV, Xenon flash lamp.		
	5. Wavelength: Absorbance 190-		
	1100 nm, Accuracy ≤1.0% or		
	0.010 from 0.000 to 3.000O.D at		
	6 position filters and adjustable		1
	filters.		

6. Photometric range 0.0-3.5 O.D or better **7.** Precision: 1.0% or 0.005 O. D from 0.0-0.2 O. D or better **8. Linearity:** $\leq 1.0\%$ 0.0-2.0 O.D, $\leq 2.0\% \ 0.0-3.0 \ O.D,$ 9. Filters: 8- position filter wheel, the instrument is delivered with the following standard filters installed: 405nm, 420nm, 450nm, 595nm, 620nm and 650nm & adjustable wavelengths filters mandatory. 10. Calibration plate: 96-well and 48 well calibration plate must be calibrated for the wavelength (e.g., 620 nm, 650 nm, 405nm, 420 nm, 450 nm, 595nm) & adjustable wavelengths filters. 11. Display: High contrast color display or better. 12. Incubator (Optional): Temperature range from ambient $+4^{\circ}$ C up to 50°C. **13. Detection:** Absorbance based. **14.** Minimum 3 speed for plate shaking 0-999 sec **15.** Read time 6sec at single

wavelength,

wavelength.

17. Programs:

100.

allowing

analysis

colorimetric

absorbance,

1536 wells.

detection,

16. Detectors: UV and Visible

10sec

Specific

according to IU from optical density in various food samples.

18.USB interface with PC/laptop data station for data output.

19. Should store protocols up to 80-

20. System with software package,

for

normalization and curve fit. **21.** Software suitable for template creation for microplates format

analysis,

limit,

raw

for

dual

analyte

quantification

turbidimetric,

report

matrix,

data,

- 22. Software should be license free or license for minimum 5 systems should be provided.

 ELISA WASHER:

 23. Fully automatic plate washer with IVD specifications.

 24. Programmable and compatible with ELISA reader supplied. Auto
 - 24. Programmable and compatible with ELISA reader supplied. Auto pipetting with variable volume take-up, software operated and programmed for the specific number of micro-wells utilization (one, two or required number of wells can be operated with preprogrammed software. Programable needle positions horizontal or vertical to an accuracy of 0.1mm for bottom washing, cross wise aspiration and overflow washing.
 - **25. Capability:** Washing of 96 well micro-plates and strips, with flat, round, U or "V" bottom well.
 - 26. Residual volume: $< 4-6 \mu l$
 - **27. Tray:** Must provide tray for 96 wells and 48 wells.
 - 28. Discard Tray: Required
 - **29.** Up to 70 programmable washing sequences
 - **30.** Wash bottle volume up to 1500 to 2000mL
 - **31.** Soak time for strip 0-10 sec and for plate up to 0-50minutes or better.
 - **32.** Software able to store 100 washing protocols or better.
 - **33.** Must include User and Service Manuals
 - **34. UPS:** At least 2KVA or compatible UPS as required for functioning of the equipment.
 - **35. Training:** The supplier must be responsible to carry out successful Installation, functionalization of the system and training of 2 technical personnel till customer satisfaction at the laboratory premises.

	36	Warranty with parts: At least		
		One year preferably longer,		
		Warranty will start from the date		
		of installation.		
		Origin: USA, Europe/UK, Japan		
		or Canada		
		e Hood		
		t include multi-purpose, inclined		
		t, open sash alarm, control		
		ent, monitoring by camera, sash		
		roller/foot switch for sash, fuse		
		glove & paper towel dispenser,		
		tion Display, Keyboard		
		nsion, and container for		
		umables.		
		Type: Universal		
	2.	Material/Surface:		
		c)Worktop: Polypropylene,		
		Stainless steel, Epoxy,		
		Stoneware or better		
		d) Internal Lining: Melamine		
		resin facing, Solid grade		
		laminate, Stoneware or		
		better.		
	3.	Nominal Size (W x D x H): 8ft		
		(4.5*3*8) or better		
	4.	Fluorescent Lighting		
3.		System: Pre-wired hood with	1	
		electronic ballast and instant		
		energy or better.		
	5.	Controller: Sentinel™ XL		
		Microprocessor, Rocket		
		Switches (Default) or better		
	6.	Ventilation: Variable airflow		
		controller AC or better		
	7.	Construction:		
		d) Main Body: Electro		
		galvanized steel with epoxy-		
		polyester hybrid Isocide™		
		Powder coating or better.		
		e) Internal Liner: Resinate™,		
		Malamine Resin Facing, solid		
		grade laminate or better		
		f) Worktop: Phenolic Resin,		
		stoneware, glass, epoxy or		
		better.		
	0	Sash Material: Laminated-		
	8.			
		Tempered and Framed Safety		
		Glass or better		

	c) Sash Configuration:		
	Vertical or Combination		
	d) Sash Opening: 1.5 feet or		
	better		
	9. Sanitary supply: Take off		
	valves for vacuum, gases,		
	liquids/water, and integrated		
	sink.		
	10. Fluorescent Light Intensity:		
	900 lux or better		
	11. Exhaust Duct: Must include		
	for proper functioning		
	12. Exhaust Volume/Static		
	Pressure: Face Velocity:		
	0.5m/s or better		
	13. Exhaust Duct Diameter: 12"		
	or better		
	14. Number of Exhaust Collar: 2		
	or better		
	15. Accessories: Mandatory to		
	provide all necessary venting		
	and ducting accessories for		
	the proper functioning of fume		
	hood. Must include User and		
	Service Manuals		
	16. Warranty with parts: At least		
	One year preferably longer, Warranty will start from the		
	date of installation.		
	17. Origin: USA, Europe/UK,		
	Japan or Canada		
	Gerber Centrifuge		
	1. Capacity: Minimum 08		
	Butyrometers or better.		
	2. RPM: At least 1100 rpm or		
	better speed (may be increased		
	and controlled).		
	3. Display: Digital Display with		
	stainless steel kettle.		
4.	4. Electronic countdown timer:	2	
	Required.	4	
	5. Automatic lid bolting with Safety		
	locks on the lid. Automatic		
	brake and automatic shutdown		
	in case of emergency.		
	6. Noise should be less than 50 db.		
	7. Accessories: Must includes:		
	Must include User and Service		
	Manuals		

along with safety S.S. locks with key. 02 Butyrometer Stands 8. UPS: Suitable Ups required for proper functioning. 9. Warranty: 1 year warranty period starts from date of installation 10. Origin: USA, Europe/UK, Japan or Canada Homogenizer/Laboratory Blender (Black and Dekker, Panasonic, Annex, Moulinex or equivalent). 1. Juicer Blender Grind 5. 2. Jar Material Type Glass 3. Type of Juicer: Centrifugal Juicer 4. 1.5L Juicer Jug, 2.0L Pulp Container (Black and Dekker, Panasonic, Annex, Moulinex or equivalent). Incubator (Hot & Cool) 1. Capacity/Volume: 150-200 liters or better 2. Interior: Stainless Steel ASTM 304 grade 3. Exterior: Textured Stainless-Steel (Electropolished) 4. Door operated insulation lamp. Outer front door wall insulated and fitted. 5. Temperature controller by microprocessor digital temperature indicator and controller. 6. Display: Touch screen/Touch Pad with wide display. 7. Control: Software required to operate the various programs and must include safety features and alarms in case of errors. 8. High density PUF insulation along with Peltier Technology.				T
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8. High density PUF insulation along with Peltier Technology.		=		
along with Peltier Technology.				
9. Vertical and easy to move.		-		
10. Must include User and Service				
Manuals.				
11. Temperature Range: up to				
+70°C or better		+70°C or better		

	10.75		T	1
	12. Max number of grids: 4 or			
	better			
	13. Automatic voltage stabilizer			
	14. Warranty: 1 year warranty			
	period starts from date of			
	installation.			
	15. Origin: USA, Europe/UK, Japan			
	or Canada			
	Microwave Oven (Dawlance,			
	Philips, Haier, PEL and Annex or			
	equivalent.)			
	1. General Requirement: The			
	microwave oven shall be simple			
	in operation.			
	2. Capable in microwave cooking			
	and defrosting.			
	3. Power Consumption: 1300W			
	approx.			
	4. Microwave Power: 700W - 850W			
7.	5. Oven Capacity: 20 liter - 25 liter	2		
	6. Microwave Frequency: 2450	-		
	MHz			
	7. Control: Soft/one touch control			
	9. Accessories: Shall be supplied			
	with a glass/ceramic tray.			
	10. Warranty: 1 year warranty			
	period starts from date of installation.			
	11. Origin: USA, Europe/UK, Japan			
	or Canada			
	Shakers (Orbital)			
	1. Speed Control: ±1rpm or better			
	2. Timer: 0.1-99.9 hours or better			
	3. Alarms: Audible & Visual			
	4. Drive Mechanism: triple-			
	eccentric counterbalanced drive			
	5. Type: Benchtop			
	6. Motor Type: Brushless, Solid			
	state			
8.	7. Speed Range: 25-500rpm or	1		
	better	1		
	8. Agitation: Orbital			
	9. Accessories: Platform-			
	Dedicated stainless steel, Utility			
	tray with non-skid rubber			
	surface. Must include User and			
	Service Manuals.			
	10. Training: Required at			
	Laboratory Premises			

	11. Warranty with parts: At least		
	One year preferably longer,		
	Warranty will start from the		
	date of installation.		
	12. Origin: USA, Europe/UK,		
	Japan or Canada		
	•		
	Automatic Fat Analyzer		
	(VELP, FOSS, Buchi or Equivalent)		
	1. Sample Positions: Minimum 6		
	positions or better		
	2. Sample Volume (Size): 0.5 to		
	5gm or better		
	3. Accuracy: ± 1%		
	4. Solvent Recovery: 75% or		
	better.		
	5. Temperature Range: 100°C-		
	300°C or better.		
	6. Other Features: Shall be		
	completely microprocessor		
	based, fully automatic boiling,		
	rinsing, drying, recovery, lifting		
	of thimbles to cooling position		
	and shutdown		
	7. Software: User interface for up-		
	gradation of software		
	8. Shall be based on official		
9.	'Soxhlet' method and 'RANDALL'		
٦.	method accepted by AOAC.	1	
	9. System must have capability to		
	perform un-attended operation,		
	must be programmable and		
	includes saved programs.		
	10. Safety Features and alarms:		
	Required		
	d) Automatic door lock and sealing		
	during extraction.		
	e) Automatic over- temp.		
	Control/protection facility.		
	f) Equivalent or ATEX classified		
	components for internal exposed		
	valves, IP 65 for other internal		
	electronics, IP55 for Liquid and		
	Dust protection, Pressurized		
	electronics cabinet		
	11. Accessories to be supplied: The		
	system should be supplied with		
	at least.		
	i) 12 aluminum extraction cups		
	(preferably ≥ 150 ml.),		
	J //		

			 <u> </u>
	j) 24 dozen of suitable cellulose		
	thimbles (preferably 33 Ø x 80		
	mm) or Filter Bags, at least 6		
	Viton seals,		
	k) 2 sample trays.		
	1) 1 Kg boiling stones		
	m) 1Kg Celite		
	. –		
	n) 2 stands for extraction cups		
	o) 2 recovery flask and other		
	required accessories for smooth		
	functioning.		
	p) User manual and service manual		
	must be included		
	12. Training: The supplier must be		
	responsible to carry out		
	successful Installation,		
	functionalization of the system		
	_		
	and training of 2 technical		
	personnel till customer		
	satisfaction at the laboratory		
	premises.		
	13. Warranty with parts: At least		
	One year preferably longer,		
	Warranty will start from the date		
	of installation.		
	14. Origin: USA, Europe/UK, Japan		
	or Canada		
	UV-visible Spectrophotometer with		
	monitor and printer (Double beam)		
	1. A fully automated		
	spectrophotometer with double		
	beam optics with pre-		
	programmed applications		
	using conventional quartz /		
	glass cuvettes with all the		
	required accessories		
	2. Detector: Silicon Photodiode		
	dual detector		
10.	3. Wavelength Display and		
10.	setting: 0.1nm increments or better	1	
	4. Wavelength Range: 190 –		
	1100 nm		
	5. Wavelength Accuracy: ±		
	0.1nm and ± 0.3nm entire		
	range or better		
	6. Wavelength Repeatability: ±		
	0.1nm or better		
	7. Scanning Speed:		
	iii. 3000 to 2nm/min		
	iv. 29000nm/ min during		
	survey		

8.	Spect	tral Bandwidth: 1nm or		
	better	r		
9.		ometric Range:		
		rbance = -4.0 to 4.0 Abs		
	or bet			
10.	Light	Source:Built in, auto		
		on adjustment light		
		e 20-W halogen lamp, n and deuterium lamp or		
	better			
11.		color touch screen		
12.		ine stability: Less than		
		03 Abs /hr.		
13.		ine flatness: less than ±		
		D6 Abs		
14.		ometric Accuracy:		
	iv.	± 0.002Abs at 0.5 Abs,		
	v.	± 0.004 Abs at 1 Abs,		
	vi.	± 0.006 Abs at 2 Abs		
15.		ometric Repeatability: less than ± 0.0002Abs		
	iv.			
		at 0.5 Abs		
	v.	less than ± 0.0002 Abs		
		at 1 Abs		
	vi.	less than ± 0.001 Abs		
		at 2 Abs		
16.	-	Light:		
	iv.	less than 0.02 % at		
		220nm (Nal)		
	v.	less than 0.02 % at		
		340nm (NaNo2)		
	vi.	less than 0.5 % at		
	_	198nm (KCl)		
17.		ssories and spares:		
	x.	Software compatible pc		
		and printer		
	xi.	Service Manuals and		
	:•	user manuals required		
	xii.	One pair each of 0.5, 1		
		and 3-ml quartz		
		cuvettes 10 mm path		
		length		
	xiii.	Cuvette holder		
	xiv.	Deuterium Lamp		
	xv.	Halogen lamp		
	xvi.	Suitable Certified		
		Standards for		
		Validation including		
		Holmium oxide glass		
		filters for wavelength		
		calibration & NIST		
		traceable	 	

xvii. NIST traceable Potassium dichromate xviii. Must include User and Service Manuals 18. UPS: Compatible UPS minimum of 2 KVA for proper functioning 19. Training: The supplier must be responsible to carry out successful Installation, functionalization of the system and training of 2 technical personnel till customer satisfaction. 20. Warranty: 1 year warranty period starts from date of	
xviii. Must include User and Service Manuals 18. UPS: Compatible UPS minimum of 2 KVA for proper functioning 19. Training: The supplier must be responsible to carry out successful Installation, functionalization of the system and training of 2 technical personnel till customer satisfaction. 20. Warranty: 1 year warranty	
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personnel till customer satisfaction. 20. Warranty: 1 year warranty	
satisfaction. 20. Warranty: 1 year warranty	
20. Warranty: 1 year warranty	
installation.	
21. Origin: USA, Europe/UK,	
Japan or Canada	
Water Purification System	
(deionizer)	
1. Quality of water: Should	
deliver Type I/Ultra- pure as	
per international specifications	
as follows:	
d) Electrical Resistivity Min.	
$18.2 \text{ M}\Omega/\text{cm} @ 25^{\circ}\text{C}.$	
e) Conductivity 0.055μS /cm	
compensated to 25°C.	
f) TOC level (system with UV	
lamp) 1 lit / min.	
2. Production Capacity: 3L/	
Hour flow rate	
3. Tank Volume: 6L, Built-in	
reservoir 4. Feed water: Should have	
4. Feed water: Should have separate feed water (Potable tap	
water) specific purification 1 cartridge and application	
specific polishing cartridge.	
5. Controller & Display: Should	
have calibrated meters for	
continuous monitoring and LCD	
display of water quality	
parameters: Product water	
resistivity/ conductivity both	
compensated and non-	
compensated mode, product	
water temperature, alarms for	
resistivity greater or below set	
points.	
6. Training: The supplier must be	
responsible to carry out	
successful Installation,	
functionalization of the system	
and training of 2 technical	

			, ·	
	personnel till customer			
	satisfaction at the laboratory			
	premises.			
	7. Accessories:			
	c) User Manual and Service			
	Manuals must be included.			
	d) 1 Extra set of filter			
	, , , , , , , , , , , , , , , , , , ,			
	cartridges required.			
	8. Warranty with parts: At least			
	One year. Warranty will start			
	from the date of installation.			
	9. Origin: USA, Europe/UK,			
	Japan or Canada			
	TDS Meter			
	1. Dual Channel Instrument for			
	measuring ion concentrations,			
	conductivity, salinity, TDS, and			
	resistivity.			
	2. Resolution:			
	For conductivity 0.001µS/cm to			
	20000μS /cm			
	3. Conductivity Calibrators			
	Solution (Low, Medium and High			
	Micro Simons)			
	4. TDS: Range 1 to 199.9 g/L			
	(TDS) at variable Temperature			
12.		2		
	from 0°C to 100°C	2		
	5. Memory: 50 Sets or better.			
	6. Display: LCD display			
	7. Accessories: Mandatory to			
	Provide Calibration standards			
	set, user manual and service			
	manuals			
	8. Warranty: 1 year warranty			
	period starts from date of			
	installation.			
	9. Origin: USA, Europe/UK, Japan			
	or Canada			
	Flame Photometer (Automatic)			
	1. Detection of Sodium,			
	Potassium, Calcium (0 to			
	100ppm)			
	2. Reproducibility: 0.5% to 1% or			
	better			
13.	3. Sensitivity: 0.1 to 0.5 ppm			
13.	4. Automation System: Must	1		
	includes auto-sampler, diluter			
	and mixer.			
	5. Filters: Provision of filters for			
	sodium, potassium and			
	calcium is mandatory			
	6. Software: User administration			
	(built-in software with			

		T	T	
	automatic flame system/gas			
	control). 7. Fuel: LPG or natural gas			
	8. Safety Feature: system with			
	auto detection of flame failure			
	and ignition system is			
	mandatory.			
	9. Printing facility along with			
	printer			
	10. Display: Wide Digital LED			
	11. Accessories: Mandatory to			
	provide; e) calibration controls and			
	standards			
	f) calibration certificates			
	g) user manuals & service			
	manuals			
	h) provision of			
	compressors & pressure			
	detectors and cooling			
	system.			
	12. UPS: Mandatory to provide			
	system compatible UPS.			
	13. Training: Training to staff			
	regarding method development,			
	usage and complete operation			
	of instrument.			
	14. Warranty: At least One year,			
	Warranty will start from the			
	date of installation.			
	15. Origin: USA, Europe/UK,			
	Japan or Canada			
	oupui oi ouiluu			
	Melting Point apparatus			
	1. Automatic Determination of			
	Melting Point, Boiling Point,			
	Cloud Point & Slip Melting Point			
	2. Measurement: Simultaneous			
	measurement of up to 3 samples			
	for melting point/melting range			
	and up to 2 for boiling, cloud,			
14.	and slip melting points.	1		
	3. Display: High Quality wide color	_		
	display			
	4. Optimized Heating Block allows			
	faster cooling times and therefore			
	higher sample throughput per			
	hour.			
	5. Cool-down time (350 °C – 50 °C)			
	~ 5.5 min.			
	6. Accessories:			

Slip Point capillaries: 2 Boiling Point Capillaries: 2 Cloud Point Capillaries: 2 Mandatory to provide user manual, service manual and all necessary accessories for proper functioning. 7. Lens: Essy observation of the melting process through a magnifying lens of 6X or better. 8. Temperature Range: Ambient +10 to 350°C or better. 9. Storage: up-to 50 or better. 10. Training: The supplier must be responsible to carry out successful installation, functionalization of the system and training of 2 technical personnel till customer satisfaction at the laboratory premises. 11. Warranty with parts: At least One year, Warranty will start from the date of installation. 12. Origin: USA, Europe/UK, Japan or Canada Microscope with Camera an analysis Software 1. Body: Cast alloy aluminum stand material with anti-reflective, anti-microbial treatment or better. 2. Tinocular Microscope, Built-in High-Resolution Camera, Calibrated (Numerical) Eyepiece. 3. Observation Mode: incident polarized light/ Brightfield or better. 4. Head: 'Trinocular (Fixed, 360' rotating and 30° inclined. Interpupillary distance 48-75mm or better. 5. Dioptric Adjustment: On the left eyepiece tube or better. 6. Eyepieces: Wel Toky Zomm, High eye-point and secured by screw or better. 7. Objectives:				
Boiling Point Capillaries: 2 Cloud Point Capillaries: 2 Mandatory to provide user manual, service manual and all necessary accessories for proper functioning. 7. Lens: Easy observation of the melting process through a magnifying lens of 6X or better. 8. Temperature Range: Ambient +10 to 350°C or better. 9. Storage: up-to 50 or better. 10. Training: The supplier must be responsible to carry out successful Installation, functionalization of the system and training of 2 technical personnel till customer satisfaction at the laboratory premises. 11. Warranty with parts: At least One year, Warranty will start from the date of installation. 12. Origin: USA, Europe/UK, Japan or Canada Microscope with Camera an analysis Software 1. Body: Cast alloy aluminum stand material with anti-reflective, anti-microbial treatment or better. 2. Trinocular Microscope, Built-in High-Resolution Camera, Calibrated [Numerical] Eyepiece. 3. Observation Mode: Incident polarized light/Hrightfield or better. 4. Head: Trinocular (Fixed, 360' rotating and 30' inclined. Interpupillary distance 48-75mm or better. 5. Dioptric Adjustment: On the left eyepiece tube or better. 6. Eyepieces: Well Dox/20mm, High eye-point and secured by screw or better. 7. Objectives:		Melting Point Capillaries: 3		
Cloud Point Capillaries: 2 Mandatory to provide user manual, service manual and all necessary accessories for proper functioning. 7. Lens: Easy observation of the melting process through a magnifying lens of 6X or better. 8. Temperature Range: Ambient +10 to 350°C or better. 9. Storage: up-to 50 or better. 10. Training: The supplier must be responsible to carry out successful Installation, functionalization of the system and training of 2 technical personnel till customer satisfaction at the laboratory premises. 11. Warranty with parts: At least One year, Warranty will start from the date of installation. 12. Origin: USA, Europe/UK, Japan or Canada Microscope with Camera an analysis Software 1. Body: Cast alloy sluminum stand material with anti-reflective, anti-microbial treatment or better. 2. Trinocular Microscope, Built-in High-Resolution Camera, Calibrated (Numerical) Eyepiece. 3. Observation Mode: Incident polarized light/Brightfield or better. 4. Head: Trinocular (Fixed, 360° rotating and 30° inclined. Interpupillary distance 48-75mm or better. 5. Dioptric Adjustment: On the left eyepiece tube or better. 6. Eyepieces: WP 10x/20mm, High eye-point and secured by screw or better. 7. Objectives:				
Mandatory to provide user manual, service manual and all necessary accessories for proper functioning. 7. Lens: Easy observation of the melting process through a magnifying lens of 6X or better. 8. Temperature Range: Ambient +10 to 350°C or better. 9. Storage: up-to 50 or better. 10. Training: The supplier must be responsible to carry out successful Installation, functionalization of the system and training of 2 technical personnel till customer satisfaction at the laboratory premises. 11. Warranty with parts: At least One year, Warranty will start from the date of installation. 12. Origin: USA, Europe/UK, Japan or Canada Microscope with Camera an analysis Software 1. Body: Cast alloy aluminum stand material with anti-rellective, anti-microbial treatment or better. 2. Trinocular Microscope, Built-in High-Resolution Camera, Calibrated (Numerical) Eyepiece. 3. Observation Mode: Incident polarized light/Brightfield or better. 4. Head: Trinocular (Fixed, 360° rotating and 30° inclined. Interpupillary distance 48-75mm or better. 5. Dioptic Adjustment: On the left eyepiece tube or better. 6. Eyepleces: WF10x/20mm, High eye-point and secured by screw or better. 7. Objectives:				
manual, service manual and all necessary accessories for proper functioning. 7. Lens: Easy observation of the melting process through a magnifying lens of 6X or better. 8. Temperature Range: Ambient +10 to 350 C or better. 10. Training: The supplier must be responsible to carry out successful Installation, functionalization of the system and training of 2 technical personnel till customer satisfaction at the laboratory premises. 11. Warranty with parts: At least One year, Warranty will start from the date of installation. 12. Origin: USA, Europe/UK, Japan or Canada Microscope with Camera an analysis Software 1. Body: Cast alloy aluminum stand material with anti-reflective, anti-microbial treatment or better. 2. Trinocular Microscope, Built-in High-Resolution Camera, Calibrated (Numerical) Eyepiece. 3. Observation Mode: Incident polarized light/Brightfield or better. 4. Head: Trinocular (Fixed, 360' rotating and 30' inclined. Interpupillary distance 48-75mm or better. 5. Dioptric Adjustment: On the left eyepiece tube or better. 6. Eyepleces: WP10x/20mm, High eye-point and secured by screw or better: 7. Objectives:		-		
necessary accessories for proper functioning. 7. Lens: Easy observation of the melting process through a magnifying lens of &X or better. 8. Temperature Range: Ambient +10 to 350°C or better. 9. Storage: up-to 50 or better. 10. Training: The supplier must be responsible to carry out successful installation, functionalization of the system and training of 2 technical personnel till customer satisfaction at the laboratory premises. 11. Warranty with parts: At least One year, Warranty will start from the date of installation. 12. Origin: USA, Europe/UK, Japan or Canada Microscope with Camera an analysis Software 1. Body: Cast alloy aluminum stand material with anti-reflective, anti-microbial treatment or better. 2. Trinocular Microscope, Built-in High-Resolution Camera, Calibrated (Numerical) Eyepiece. 3. Observation Mode: Incident polarized light/Brightfield or better. 4. Head: Trinocular (Fixed, 360° rotating and 30° inclined. Interpupillary distance 48-75mm or better. 5. Dioptric Adjustment: On the left eyepiece tube or better. 6. Eyepleces: WF10x/20mm, High eye-point and secured by screw or better. 7. Objectives:		3 1		
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7. Lens: Easy observation of the melting process through a magnifying lens of 6X or better. 8. Temperature Range: Ambient +10 to 350°C or better. 9. Storage: up-to 50 or better. 10. Training: The supplier must be responsible to carry out successful Installation, functionalization of the system and training of 2 technical personnel till customer satisfaction at the laboratory premises. 11. Warranty with parts: At least One year, Warranty will start from the date of installation. 12. Origin: USA, Europe/UK, Japan or Canada Microscope with Camera an analysis Software 1. Body: Cast alloy aluminum stand material with anti-reflective, anti-microbial treatment or better. 2. Trinocular Microscope, Built-in High-Resolution Camera, Calibrated (Numerical) Eyepiece. 3. Observation Mode: Incident polarized light/Brightfield or better. 4. Head: Trinocular (Fixed, 360° rotating and 30° inclined. Interpupillary distance 48-75mm or better. 5. Dioptric Adjustment: On the left eyepiece tube or better. 6. Eyepleces: WP10x/20mm, High eye-point and secured by screw or better 7. Objectives:		necessary accessories for proper		
melting process through a magnifying lens of 6X or better. 8. Temperature Range: Ambient +10 to 350°C or better. 9. Storage: up-to 50 or better. 10. Training: The supplier must be responsible to carry out successful Installation, functionalization of the system and training of 2 technical personnel till customer satisfaction at the laboratory premises. 11. Warranty with parts: At least One year, Warranty will start from the date of installation. 12. Origin: USA, Europe/UK, Japan or Canada Microscope with Camera an analysis Software 1. Body: Cast alloy aluminum stand material with anti-reflective, anti-microbial treatment or better. 2. Trinocular Microscope, Built-in High-Resolution Camera, Calibrated (Numerical) Eyepiece. 3. Observation Mode: Incident polarized light/ Brightfield or better. 4. Head: Trinocular (Fixed, 360° rotating and 30° inclined. Interpupillary distance 48-75mm or better. 5. Dioptric Adjustment: On the left eyepiece tube or better. 6. Eyepieces: WPI Ox/20mm, High eye-point and secured by screw or better. 7. Objectives:		functioning.		
magnifying lens of 6X or better. 8. Temperature Range: Ambient +10 to 350°C or better. 9. Storage: up-to 50 or better. 10. Training: The supplier must be responsible to carry out successful Installation, functionalization of the system and training of 2 technical personnel till customer satisfaction at the laboratory premises. 11. Warranty with parts: At least One year, Warranty will start from the date of installation. 12. Origin: USA, Europe/UK, Japan or Canada Microscope with Camera an analysis Software 1. Body: Cast alloy aluminum stand material with antirefective, anti-microbial treatment or better. 2. Trinocular Microscope, Built-in High-Resolution Camera, Calibrated (Numerical) Eyepiece. 3. Observation Mode: Incident polarized light/Brightfield or better. 4. Head: Trinocular (Fixed, 360° rotating and 30° inclined. Interpupillary distance 48-75mm or better. 5. Dioptric Adjustment: On the left eyepiece with a secured by screw or better. 7. Objectives:		7. Lens: Easy observation of the		
8. Temperature Range: Ambient +10 to 350°C or better. 9. Storage: up-to 50 or better. 10. Training: The supplier must be responsible to carry out successful Installation, functionalization of the system and training of 2 technical personnel till customer satisfaction at the laboratory premises. 11. Warranty with parts: At least One year, Warranty will start from the date of installation. 12. Origin: USA, Europe/UK, Japan or Canada Microscope with Camera an analysis Software 1. Body: Cast alloy aluminum stand material with antireflective, anti-microbial treatment or better. 2. Trinocular Microscope, Built-in High-Resolution Camera, Calibrated (Numerical) Eyepiece. 3. Observation Mode: Incident polarized light/Brightfield or better. 4. Head: Trinocular (Fixed, 360° rotating and 30° inclined. Interpupillary distance 48-75mm or better. 5. Dioptric Adjustment: On the left eyepiece tube or better. 6. Eyepieces: WF10x/20mm, High eye-point and secured by screw or better 7. Objectives:		melting process through a		
+10 to 350°C or better. 9. Storage: up-to 50 or better. 10. Training: The supplier must be responsible to carry out successful Installation, functionalization of the system and training of 2 technical personnel till customer satisfaction at the laboratory premises. 11. Warranty with parts: At least One year, Warranty will start from the date of installation. 12. Origin: USA, Europe/UK, Japan or Canada Microscope with Camera an analysis Software 1. Body: Cast alloy aluminum stand material with antireflective, anti-microbial treatment or better. 2. Trinocular Microscope, Built-in High-Resolution Camera, Calibrated (Numerical) Eyepiece. 3. Observation Mode: Incident polarized light/Brightfield or better. 4. Head: Trinocular (Fixed, 360° rotating and 30° inclined. Interpupillary distance 48-75mm or better. 5. Dioptric Adjustment: On the left eyepiece two or better. 6. Eyepieces: WF10x/20mm, High eye-point and secured by screw or better. 7. Objectives:		magnifying lens of 6X or better.		
9. Storage: up-to 50 or better. 10. Training: The supplier must be responsible to carry out successful Installation, functionalization of the system and training of 2 technical personnel till customer satisfaction at the laboratory premises. 11. Warranty with parts: At least One year, Warranty will start from the date of installation. 12. Origin: USA, Europe/UK, Japan or Canada Microscope with Camera an analysis Software 1. Body: Cast alloy aluminum stand material with antireflective, anti-microbial treatment or better. 2. Trinocular Microscope, Built-in High-Resolution Camera, Calibrated (Numerical) Eyepiece. 3. Observation Mode: Incident polarized light/Brightfield or better. 4. Head: Trinocular (Fixed, 360' rotating and 30' inclined. Interpupillary distance 48-75mm or better. 5. Dioptric Adjustment: On the left eyepieces: WF10x/20mm, High eye-point and secured by screw or better. 7. Objectives:		8. Temperature Range: Ambient		
10. Training: The supplier must be responsible to carry out successful Installation, functionalization of the system and training of 2 technical personnel till customer satisfaction at the laboratory premises. 11. Warranty with parts: At least One year, Warranty will start from the date of installation. 12. Origin: USA, Europe/UK, Japan or Canada Microscope with Camera an analysis Software 1. Body: Cast alloy aluminum stand material with antireflective, anti-microbial treatment or better. 2. Trinocular Microscope, Built-in High-Resolution Camera, Calibrated (Numerical) Eyepiece. 3. Observation Mode: Incident polarized light/Brightfield or better. 4. Head: Trinocular (Fixed, 360' rotating and 30' inclined. Interpupillary distance 48-75mm or better. 5. Dioptric Adjustment: On the left eyepiece tube or better. 6. Eyepieces: WF10x/20mm, High eye-point and secured by screw or better 7. Objectives:		+10 to 350°C or better.		
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satisfaction at the laboratory premises. 11. Warranty with parts: At least One year, Warranty will start from the date of installation. 12. Origin: USA, Europe/UK, Japan or Canada Microscope with Camera an analysis Software 1. Body: Cast alloy aluminum stand material with antireflective, anti-microbial treatment or better. 2. Trinocular Microscope, Built-in High-Resolution Camera, Calibrated (Numerical) Eyepiece. 3. Observation Mode: Incident polarized light/Brightfield or better. 4. Head: Trinocular (Fixed, 360° rotating and 30° inclined. Interpupillary distance 48-75mm or better. 5. Dioptric Adjustment: On the left eyepiece tube or better. 6. Eyepieces: WF10x/20mm, High eye-point and secured by screw or better 7. Objectives:		and training of 2 technical		
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One year, Warranty will start from the date of installation. 12. Origin: USA, Europe/UK, Japan or Canada Microscope with Camera an analysis Software 1. Body: Cast alloy aluminum stand material with antireflective, anti-microbial treatment or better. 2. Trinocular Microscope, Built-in High-Resolution Camera, Calibrated (Numerical) Eyepiece. 3. Observation Mode: Incident polarized light/Brightfield or better. 4. Head: Trinocular (Fixed, 360° rotating and 30° inclined. Interpupillary distance 48-75mm or better. 5. Dioptric Adjustment: On the left eyepiece tube or better. 6. Eyepieces: WF10x/20mm, High eye-point and secured by screw or better 7. Objectives:		premises.		
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analysis Software 1. Body: Cast alloy aluminum stand material with antireflective, anti-microbial treatment or better. 2. Trinocular Microscope, Built-in High-Resolution Camera, Calibrated (Numerical) Eyepiece. 3. Observation Mode: Incident polarized light/Brightfield or better. 4. Head: Trinocular (Fixed, 360° rotating and 30° inclined. Interpupillary distance 48-75mm or better. 5. Dioptric Adjustment: On the left eyepiece tube or better. 6. Eyepieces: WF10x/20mm, High eye-point and secured by screw or better 7. Objectives:		or Canada		
1. Body: Cast alloy aluminum stand material with antirellective, anti-microbial treatment or better. 2. Trinocular Microscope, Built-in High-Resolution Camera, Calibrated (Numerical) Eyepiece. 3. Observation Mode: Incident polarized light/Brightfield or better. 4. Head: Trinocular (Fixed, 360° rotating and 30° inclined. Interpupillary distance 48-75mm or better. 5. Dioptric Adjustment: On the left eyepiece tube or better. 6. Eyepieces: WF10x/20mm, High eye-point and secured by screw or better 7. Objectives:				
stand material with antireflective, anti-microbial treatment or better. 2. Trinocular Microscope, Built-in High-Resolution Camera, Calibrated (Numerical) Eyepiece. 3. Observation Mode: Incident polarized light/Brightfield or better. 4. Head: Trinocular (Fixed, 360° rotating and 30° inclined. Interpupillary distance 48-75mm or better. 5. Dioptric Adjustment: On the left eyepiece tube or better. 6. Eyepieces: WF10x/20mm, High eye-point and secured by screw or better 7. Objectives:				
reflective, anti-microbial treatment or better. 2. Trinocular Microscope, Built-in High-Resolution Camera, Calibrated (Numerical) Eyepiece. 3. Observation Mode: Incident polarized light/Brightfield or better. 4. Head: Trinocular (Fixed, 360° rotating and 30° inclined. Interpupillary distance 48-75mm or better. 5. Dioptric Adjustment: On the left eyepiece tube or better. 6. Eyepieces: WF10x/20mm, High eye-point and secured by screw or better 7. Objectives:		· · ·		
treatment or better. 2. Trinocular Microscope, Built-in High-Resolution Camera, Calibrated (Numerical) Eyepiece. 3. Observation Mode: Incident polarized light/Brightfield or better. 4. Head: Trinocular (Fixed, 360° rotating and 30° inclined. Interpupillary distance 48-75mm or better. 5. Dioptric Adjustment: On the left eyepiece tube or better. 6. Eyepieces: WF10x/20mm, High eye-point and secured by screw or better 7. Objectives:				
High-Resolution Camera, Calibrated (Numerical) Eyepiece. 3. Observation Mode: Incident polarized light/Brightfield or better. 4. Head: Trinocular (Fixed, 360° rotating and 30° inclined. Interpupillary distance 48- 75mm or better. 5. Dioptric Adjustment: On the left eyepiece tube or better. 6. Eyepieces: WF10x/20mm, High eye-point and secured by screw or better 7. Objectives:				
Calibrated (Numerical) Eyepiece. 3. Observation Mode: Incident polarized light/Brightfield or better. 4. Head: Trinocular (Fixed, 360° rotating and 30° inclined. Interpupillary distance 48-75mm or better. 5. Dioptric Adjustment: On the left eyepiece tube or better. 6. Eyepieces: WF10x/20mm, High eye-point and secured by screw or better 7. Objectives:		2. Trinocular Microscope, Built-in		
3. Observation Mode: Incident polarized light/Brightfield or better. 4. Head: Trinocular (Fixed, 360° rotating and 30° inclined. Interpupillary distance 48-75mm or better. 5. Dioptric Adjustment: On the left eyepiece tube or better. 6. Eyepieces: WF10x/20mm, High eye-point and secured by screw or better 7. Objectives:		High-Resolution Camera,		
polarized light/Brightfield or better. 4. Head: Trinocular (Fixed, 360° rotating and 30° inclined. Interpupillary distance 48-75mm or better. 5. Dioptric Adjustment: On the left eyepiece tube or better. 6. Eyepieces: WF10x/20mm, High eye-point and secured by screw or better 7. Objectives:		Calibrated (Numerical) Eyepiece.		
15. better. 4. Head: Trinocular (Fixed, 360° rotating and 30° inclined. Interpupillary distance 48-75mm or better. 5. Dioptric Adjustment: On the left eyepiece tube or better. 6. Eyepieces: WF10x/20mm, High eye-point and secured by screw or better 7. Objectives:		3. Observation Mode: Incident		
 4. Head: Trinocular (Fixed, 360° rotating and 30° inclined. Interpupillary distance 48-75mm or better. 5. Dioptric Adjustment: On the left eyepiece tube or better. 6. Eyepieces: WF10x/20mm, High eye-point and secured by screw or better 7. Objectives: 		polarized light/Brightfield or		
 4. Head: Trinocular (Fixed, 360° rotating and 30° inclined. Interpupillary distance 48-75mm or better. 5. Dioptric Adjustment: On the left eyepiece tube or better. 6. Eyepieces: WF10x/20mm, High eye-point and secured by screw or better 7. Objectives: 	15.	better.	1	
Interpupillary distance 48- 75mm or better. 5. Dioptric Adjustment: On the left eyepiece tube or better. 6. Eyepieces: WF10x/20mm, High eye-point and secured by screw or better 7. Objectives:		4. Head: Trinocular (Fixed, 360°	1	
75mm or better. 5. Dioptric Adjustment: On the left eyepiece tube or better. 6. Eyepieces: WF10x/20mm, High eye-point and secured by screw or better 7. Objectives:		rotating and 30° inclined.		
 5. Dioptric Adjustment: On the left eyepiece tube or better. 6. Eyepieces: WF10x/20mm, High eye-point and secured by screw or better 7. Objectives: 				
left eyepiece tube or better. 6. Eyepieces: WF10x/20mm, High eye-point and secured by screw or better 7. Objectives:				
6. Eyepieces: WF10x/20mm, High eye-point and secured by screw or better 7. Objectives:				
eye-point and secured by screw or better 7. Objectives:		- -		
or better 7. Objectives:				
7. Objectives:				
		_		
v. 4x/0.10		v. 4x/0.10		

vi. 10x/0.25		
vii. 40x/0.65		
viii. 100x/1.25(Oil/Water)		
*All with anti-fungus		
treatment.		
*Objective must be strain free.		
8. Nosepiece: Quintuple Revolving nosepiece, rotation on ball		
bearings or better.		
9. Specimen Stage: Ceramic, hard		
coated and mechanical stage or		
better.		
10. Focusing: Coaxial coarse and		
fine focusing mechanism with		
limit stop to prevent the contact		
to prevent the contact between objective and specimen.		
Adjustable tension of coarse		
focusing knob.		
11. Condenser: Abbe N.A. 1.25		
swing-out Achromat condenser,		
with objective-coded iris		
diaphragm, focusable, center- able and.		
12. Illumination (Fixed Koehler		
Type): X-LED with white 3.6W		
and light intensity control, multi		
plug. Life 10000 to 20000 hours		
or better.		
13. Control: Software operated with		
pre-defined and custom programable methods.		
14. Memory (ROM & RAM):		
15. Display: LED or better.		
16. Manual Accessories: Must be		
provided with each microscope.		
viii. Working/User manual and		
service manual		
ix. Immersion oil 25 ml x 2		
x. Lens tissue paper 2 rolls or		
boxes		
xi. Specific paper roll to clean		
the eyepiece/objective lense.		
xii. Lens cleaning solution (100		
ml)		
xiii. One anti-static cleaning		
brush.		
xiv. It shall be capable of being		
stored continuously in ambient		
temperature of 0 -50°C and		
relative humidity of 15-90%.		

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	17. Digital camera: 20 mega pixel		
	scientific grade or better.		
	18. Resolution Range:		
	iii. at least 5200-5500 x 3500-		
	4000@FPS15 or better		
	iv. 2400-2500 x 1800-		
	2000@FPS53 or better.		
	19. PC System: Microscope should		
	come along with PC (Core-i7 or		
	better).		
	20. UPS: Suitable Ups required for		
	proper functioning.		
	21. Training: Training to staff		
	regarding method development,		
	usage and complete operation of		
	instrument.		
	22. Warranty: 1 year warranty		
	period starts from date of		
	installation.		
	23. Origin: USA, Europe/UK, Japan		
	or Canada		
	74 60 7		
	Muffle Furnace		
	1. Construction: Must be Rugged		
	and flexible for all types of lab		
	applications, including heating		
	of metals and drying at high temperatures.		
	2. Insulation: Multiple layers of		
	high quality, asbestos-free		
	ceramic fiber insulation.		
	3. Must have the Heating elements		
	safely positioned, covered with		
	ceramic plates.		
	4. Hinged door designed with		
1.0	parallel forced guidance system-		
16.	hot surface always faces away	1	
	from user when door is open.		
	5. Internal chamber capacity: 12		
	L or better		
	6. Temperature Range: 1100°C or		
	better		
	7. Standard Working		
	Temperature: 550°C.		
	8. Temperature accuracy: ± 1.0		
	°C		
	9. Heating rate: The furnace		
	should be of fast heating type		
	with the maximum attainable		
	temperature should reach as a		
	F		<u> </u>

	ramp function in less than one		
	hour.		
	10. Must have electronic		
	controller: with 24-hour timer		
	and exhaust vent.		
	11. Temp. Uniformity: must be ±		
	8°C or better.		
	12. Cooling Fan/ Air Circulation:		
	Attached with Furnace, provided		
	inside the control unit to protect		
	Costly component.		
	13. Accessories:		
	v. Protection Glove 4 pairs		
	vi. Crucible Clip 4 pair		
	vii. Crucibles 48 pcs		
	=		
	viii. User manual and service		
	manuals		
	14. UPS: Suitable ups required for		
	proper functioning.		
	15. Warranty: 1 year warranty		
	period starts from date of		
	installation.		
	16. Origin: USA, Europe/UK, Japan		
	or Canada		
	Hot Air oven		
	1. Material of Construction:		
	c) Interior: Stainless Steel		
	d) Exterior: Textured Stainless		
	Steel		
	2. Fully insulated stainless steel		
	door with 2 Point locking		
	(Compression door lock).		
	3. Two or more stainless		
	steel electro-polished		
	facility for adjustable		
17.	shelves, 8-10		
17.	removable dishes to be	1	
	provided.		
	4. Digital counter with target time		
	setting, adjustable from 1		
	minute to 90 days or better.		
	5. Programmed for three different		
	Temperature values with specific		
	time-period along with 05		
	Maximum Number of Intervals.		
	Program stored in case of power		
	failure.		
	6. Display: LED/TFT		
	7. Safety Alarm: Required		

	8. Volume: 100 - 120L		
	9. Manuals: User and service		
	manuals		
	10. UPS: One Compatible ups		
	r equired for proper functioning.		
	11. Warranty with parts: Warranty:		
	1 year warranty period starts		
	from date of installation.		
	12. Origin: USA, Europe/UK, Japan		
	or Canada		
	Pipette Sets		
	1. Fully autoclavable		
	2. Volume ranges for pipettes with		
	quantity:		
	d) 0.5 10uL		
18.	e) 10 - 100uL	2	
	f) 100 1,000uL	4	
	-		
	3. Warranty with parts: At least		
	One year preferably longer		
	4. Origin: USA, Europe/UK, Japan		
	or Canada		
	Tintometer		
	1. Spectral range: 400-700nm or		
	better		
	2. Viewing system: Fully		
	adjustable, prismatic with		
	integral blue filter for light		
	standardization.		
	3. Band width: 10 to 20 nm		
	4. Path Length: Up to 153 mm (6")		
	or better		
	5. Storage capacity: Should be		
	40000 measurements or better		
	6. Response/measurement		
19.	Time: Less than 30 seconds.		
19.	7. Resolution: 0.1 Lovibond unit	1	
	8. Illumination: CIE Illuminant C		
	9. Color Scales: AOCS, Lovibond,		
	APHA, FAC (Standards for Oil		
	and FAT, beta carotene)		
	10. Accessories:		
	f) Colorimetry Cells,		
	g) Conformance filters		
	h) Certified color reference		
	standards (representing		
	a range of Lovibond®		
	_		
	colors), for quick and		
	simple quality control		
	checks on instruments		
	& operators		

	') Q I 00 N '		
	i) Spare Lamp-02 No's.		
	j) Must include User and		
	Service Manuals		
	11. Repeatability: +/- 0.0002 or		
	better		
	12. Reference Filters: 15 or more		
	13. Calibration: Fully automatic		
	fast self-calibration		
	14. Software along with computer		
	15. Interfaces: USB, LAN &		
	printing facility must be		
	available.		
	16. Training: The supplier must be		
	responsible to carry out		
	successful Installation,		
	functionalization of the system		
	and training of 2 technical		
	personnel till customer		
	satisfaction at the laboratory		
	premises.		
	-		
	17. Warranty with parts: At least		
	One year preferably longer,		
	Warranty will start from the		
	date of installation.		
	18. Origin: USA, Europe/UK,		
	Japan or Canada		
	Water bath		
	1. Display: Luminous digital LED		
	2. Interior: Deep-drawn stainless		
	steel without corners and edges		
	3. Exterior: Textured stainless		
	casing		
	fittings in the bath vessel		
20	6. Temperature Range: +5-100°C		
20.	or better (with cover).	2	
	7. Temperature fluctuation: 0.1°C		
	8. Temperature Control:		
	Temperature limiter to switch-off		
	heating in case of failure.		
	9. Capacity: 20-25 Liters		
	10. Auto diagnostic system with fault		
	indicator.		
	11. Mandatory to provide calibration		
	certificates		
	12. Timers: Optimize scheduling		
	with auto-on and auto-off timers		

	(1 Minutes to 99 Hours or			
	continuous).			
	13. Temperature Stability /			
	Uniformity @ 37°C: ±0.02°C			
	14. Accessories:			
	e) Stainless Steel /			
	Polypropylene Test tube rack			
	for test tubes of variable			
	diameter: 04 No's.			
	f) Trays for Beakers (100 ml			
	and 500ml)			
	g) Spring tray/ racks for			
	Erlenmeyer flasks (250/500			
	mL): 04 No's.			
	h) Must include User and			
	Service Manuals			
	13. Warranty with parts: At least			
	One year preferably longer,			
	Warranty will start from the date			
	of installation.			
	14. Origin: USA, Europe/UK, Japan or Canada.			
	UHPLC (Ultra High-Performance			
	Liquid Chromatography)			
	1. The system must have			
	compatibility for both HPLC &			
	UHPLC applications.			
	2. Quaternary Pump:			
	a) Must include integrated			
	vacuum degassing technology,			
	accurate & precise flows,			
	accurate solvent blend.			
	b) Automatic piston seal wash &			
	long seal life required with quick & easy routine maintenance.			
	c) Must have settable flow range			
21.	of 0.001-5ml/min or better.	1		
	d) Must have Flow Accuracy up	1		
	to +/-1.0%.			
	e) Must have flow precision of			
	<0.075% RSD or better.			
	f) Must have composition			
	accuracy up to +/-0.5%			
	g) Must have composition			
	precision of +/-0.15% RSD or			
	better.			
	h) Must have maximum operating			
	pressure of 11000 to 15000 Psi			
	or better.			
	i) Must have Pump Seal Wash as			
	Standard.			
	<u> </u>		1	1

j) Must have pH Range of 1 to		
12.		
k) Automated Dwell volume		
selection & integrated vacuum		
degassing of four chambers.		
3. Infinity Vial Auto-Sampler		
a) Must have injection volume		
range of 0.1ul to 100ul or better.		
b) Must have Sample capacity: 96		
vials or better.		
c) Must have sample		
compartment temp 4-40°C.		
d) Must have temp accuracy +/-		
0.5°C or higher.		
e) Must have sample		
carryover<0.003% or better.		
f) Must include additional		
capabilities Auto-dilution; auto		
addition; load ahead integral,		
active and programmable		
injection needle wash.		
4. Thermostatic Column		
Compartment/Oven (or		
Equivalent)		
a) Must have temp accuracy of		
+/-0.5°C		
b) Must have temperature		
stability of +/-0.5°C.		
c) Must have temperature range		
8°C (Above ambient) to 80°C or		
better.		
d) Must have Column Capacity		
up to 3 columns with 3 positions		
e) Automatic Column switching		
valve (able to accommodate 4-		
columns).		
5. Photodiode Array Detector		
(HPLC/UHPLC/UPLC capability)		
a) Must have No. of PDA channel:		
800 to 1024 or better		
b) Must have wavelength of 190-		
800nm or better.		
c) Must have drift of <1 * 10-3		
AU/hr. or better.		
d) Must have wavelength		
accuracy up to ±1nm or better.		
e) Must have automatic		
wavelength and photometric		
accuracy, correction check,		
linearity noise level, drift, system		
check.		
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	b) Software must have option to		
a) Software must have LIMS /	multi-vendor system connectivity.		
c) Software must have this /	c) Software must have LIMS /		
LMS support.			
9. Accessories:			
a) For Sugars and Sugar in	, -		
Honey: - Hi-plex H Column	Honey: - Hi-plex H Column		

(7.7mm*300mm*8µm)	
02 No's	
b) For Aflatoxins/Mycotoxins: -	
Zorbax Eclipse-XBD	
C18(4.6mm*150mm*3.5µm and	
C18. 4.6*150, 5µm) (02 Nos.).	
c) For Sudan Dyes 1,2,3,4: -	
Silica Gel C18 (250*4.6mm*5µm)	
02 No's	
d) Exisil Pure 120 RP18;	
(250mm*4.6mm*10μm) 02	
No's	
e) Cation Exchange column	
3.9*150, Sum (IC-PAK or	
Equivalent)	
01 No.	
f) C18. 4.6*250*5μm	
02 Nos.	
g) C18. 4.6*250*2.7µm	
01 Nos.	
h) C18. 4.6*250*10µm	
01 Nos.	
i) C18. 4.6*250*1.5μm	
01 Nos.	
j) C18. 4.6*150*1.5μm	
01 Nos.	
k) Phenyl XP L11. 4.6*50*2.5µm	
01 Nos.	
l) Phenyl L11-4.6*150*2.5μm	
01Nos.	
m)Phenyl 4.6*250*5µm	
01Nos	
n) C18. 3*100*2.7µm	
01 Nos.	
o) C8.2.1*100*2.7μm	
01 Nos	
p) C4. 50mm*2.1mm*3µm	
01 Nos.	
q) PM Kit for Diode array	
Detector 01Nos.	
r) PM Kit for Quaternary Pump	
01 Nos.	
s) 2ml Glass Vial Pre-Slit Septa	
Amber 1000 vials	
t) User and Service Manuals	
included	
u) Tool Kit for all system	
maintenance must be included	
v) Application notes must be	
included regarding sugars,	
artificial sweeteners, Vitamins,	
refractive index, preservatives	

	and caffeine determination in		
	food samples.		
	10. DisQue Quechers (1g		
	Trisodium citrate Dihydrate, 0.5g		
	Disodium Hydrogencitrate		
	Sesquilhyd rate, 1g NaCL and 4g		
	MgSO4, 50ml pouch) 100Nos.		
	11. SPE cartridges: 3cc, 60mg		
	Sorbent per cartridge, 30um		
	particle size- Qty; 03 Nos.		
	Oasis Prime HLB 3ccVac		
	cartridge, 150mg Sorbent per		
	cartridge, 100/pk		
	Extra tubing at least 03 sets		
	18. Solvent Filtration Assembly of		
	PTFA (Sartorius)		
	19. Branded Computer (Core i7)		
	with LED and network laser jet		
	printer and original Microsoft		
	compatible windows.		
	21. UPS: A system compatible		
	UPS along-with voltage stabilizer.		
	22. Training: Training to staff		
	regarding method Development,		
	usage and complete operation of		
	instrument (application)		
	23. Warranty: Warranty at least		
	1 years with all possible library		
	matches related to Food		
	Applications and necessary		
	parts.warranty will start from		
	date of installation.		
	25. Origin: USA, Europe/UK,		
	Japan or Canada		
	PCR (Real-time)		
	1. Reaction volume and Sample		
	capacity (wells): 96-well block: 5-		
	50μL or better.		
	2. Excitation source: Bright white		
	LED or better		
	3. Optical Detection: 96-well: 4 to		
22.	8 decoupled filters,		
44.	4. Excitation/Detection range:	1	
	96-well: 400-700 nm/490-800		
	nm		
	5. Multiplexing: 96-well: up to 5-		
	7 targets,		
	6. Maximum block ramp rate: 96-		
	well block: 5-8°C/sec or better.		
	7. Average sample ramp rate: 3 to		
	4°C/sec or better		

8. Temperature uniformity: 0.3 to		
0.5°C or better.		
9. Compatible dyes:		
a) TaqMan probe		
b) FAM/SYBR Green		
, ,		
c) VIC/JOE/HEX/TET		
d) ABY/NED/TAMRA/Cy3		
e) JUN, ROX/		
f) Texas Red, Mustang Purple		
TM		
g) Cy®5/LIZTM		
h) Cy®5.5		
10. Run Time: ≤25-40min runs		
11. Security, auditing, and e-		
signature (SAE) features, yes,		
with no additional fees		
12. Including operational		
software		
13. Methods: Software operated		
programs, pre-defined methods,		
and editable user defined		
methods.		
a) TaqMan probe		
b) FAM/SYBR Green		
c) VIC/JOE/HEX/TET		
d) ABY/NED/TAMRA/Cy3		
, , ,		
e) JUN, ROX/		
Texas Red, Mustang Purple TM		
f) Cy®5/LIZTM		
g) Cy®5.5		
14. Accessories:		
Gel electrophoresis:		
a) Tank: 500mL to 900mL		
volume, samples 16-50,		
b) Dimensions (L x W x H): 8-10 x		
6-8 x 3-5 in.		
c) Gel casting tray: UV		
transmissible with rubber dams		
d) 2 combs:16 -30 wells		
e) Power supply (up to 250-300V,		
2-3 jacks, timer: 0-999 minutes,		
current: 350-400mA, frequency		
40-50/60-70Hz, Voltage: 120V,		
display: voltage, current and		
time, Dimensions (L x W x H): 10-		
11 x 5-6 x 4.5-5.5 in.		
Trans illuminator:		
a) Wavelength: 302, 312nm or		
better		
b) Light source: blue LED		
c) Image a range of EtBr, gel red,		
gel green and other dyes.		
ger green and omer dyes.		

			1
	d) Viewing area (18-20 x 15-18		
	cm) with orange filter.		
	e) Voltage: 120-250 V		
	f) Must include User and Service		
	Manuals		
	15. System: Minimum Core-i7		
	laptop or better and input or		
	output storage		
	16. UPS: Mandatory to provide		
	system compatible UPS		
	17. Training: The supplier must		
	be responsible to carry out		
	successful Installation,		
	functionalization of the system		
	l		
	and training of 2 technical		
	personnel till customer		
	satisfaction at the laboratory		
	premises.		
	18. Warranty: 1 year warranty		
	period starts from date of		
	installation.		
	19. Origin: USA, Europe/UK,		
	Japan or Canada		
	NIR with supporting UPS		
	1. Instrument UV Vis and UV-Vis		
	NIR Spectrophotometers		
	measurement modes		
	2. Absolute specular reflection at		
	variable angle from 5-85° in 0.02°		
	intervals. Direct transmission		
	and variable angle transmission		
	from 0-90° inn 0.02° intervals		
	diffuse scattering reflection or		
	transmission through		
	independent sample rotation		
	(360°) and detector positioning		
	between 10-350° at 0.02° in		
23.	intervals.	1	
	3. Absorptance, A where A=1-R-T	1	
	_		
	at variable angle without moving		
	the sample or beam onto the		
	sample for improved productivity		
	and greater accuracy.		
	Reflection/Transmission at single		
	wavelength (read) or wavelength		
	range (scan) Wavelength range		
	190-2800 nm		
	4. Customizable and very easy to		
	use interface for use for variety of		
	food applications.		
	5. Measurement in visible range		
	possible with VIS option.		
	Possible with A10 obtton.		<u> </u>

6. Measurement of solid, liquid		
samples all possible with one		
instrument.		
7. Easy calibration creation &		
maintenance with AUTOCAL		
function.		
8. Two Sample modes, up view		
(measurement beam from top of		
sample) and down view		
(measurement view from below		
sample) so it can be used for all		
kinds of food samples		
9. Wavelength range NIR 900-		
1700nm, Resolution NIR 7.0nm		
10. Wavelength range VIS 400-		
900nm, Resolution VIS 10nm		
11. Detector NIR		
Thermoelectrically cooked in gas		
Detector VIS 5i		
12. Training to Staff regarding		
Method Development, usage, and		
Complete Operation of		
Instrument		
13. The supplier must be		
responsible to carry out		
successful Installation,		
functionalization of the system		
and training of 2 technical		
personnel till customer		
satisfaction at the laboratory		
premises.		
14. Warranty: 1 year warranty		
period starts from date of		
installation.		
15. Origin: USA, Europe/UK,		
Japan or Canada		

NOTE:

- Rate must be quoted on this proforma otherwise Bid shall not be entertained.
- Specifications of all aforementioned Items are same as mentioned in Technical Form.

4. TECHNICAL REQUIREMENTS

4.1 General:

- 4.1.1 Any Bid not received as per terms and conditions of the tender enquiry is liable to be rejected and also no Bid shall be considered if:
- 4.1.1.1 The Bid is not prepared and submitted as per instructions given in the Bidding Documents.
- 4.1.1.2 Received without detailed technical literature, in original, from the manufacturer, where applicable.
- 4.1.1.3 Received without verifiable office addresses, Telephone No., E-mail addresses of the Bidder as well as the manufacturer.
- 4.1.1.4 Received without the proofs for availability of company trained certified engineer for installation, commissioning and after sale services of quoted equipment/machine.
- 4.1.1.5 The Bid is ambiguous, if determined by the Procurement Committee.
- 4.1.1.6 Items should be brand new and by original manufacturers. Provision of verifiable office addresses, telephone numbers and E-mail addresses of original manufacturers will be mandatory.
- 4.1.1.7 Bid must be supported with comprehensive technical literature in original and containing complete details of the manufacturer (i.e., official addresses, official website, telephone numbers, E-mail addresses of sales and customer support etc.). Ambiguous documents/photocopies/unauthorized computer prints shall not be accepted. Provision of specifications in original (English) for the materials/goods offered will be mandatory. Bid is liable to be disqualified if relevant literature/specifications are not attached with the Bid.
- 4.1.1.8 Only manufacturers/authorized distributors for the supply of Items are eligible to participate.
- 4.1.1.9 For quoted items, the Bidder must submit the authorization letter/certificate with Bid that may be checked later on and verified from the issuing company. [Where applicable]
- 4.1.1.10 Origin and manufacturing of the equipment shall be either USA, Europe, UK, Japan or Canada.
- 4.1.1.11 At the time of delivery, import document will be checked (as and where applicable).
- 4.1.1.12 In addition to quoted Item any other integral accessory/component (if required for complete functioning) must be mentioned and quoted as an optional Item.
- 4.1.1.13 Installation of Items including training of operation and maintenance procedures should be included in the package.

4.2 Delivery Period:

4.2.1 Delivery period will be as per Purchase Order.

4.3 Preparation of Technical Proposal:

4.3.1.1 Bids should be in the form of a single folder in properly bound form. Preferably various sections of the Bid should be marked using colored separators or other appropriate means. Following points may be kept in mind while preparing Technical Proposal:

a.	Make & Type of quoted items	Provide detail of Items, brands, country of origin with complete specification being offered on company letter head (duly signed and stamped beneath by the Bidder).
b.	Brief Profile of the Firm	Mention Company Introduction, Type of Business, Offices & Services in Pakistan, Professional Staff (Administrative & Technical), Verifiable Office addresses, Telephone & Cell No., E-mail address for Contacts.
c.	Details of Experience	Provide list of contracts in-hand/ performed by the bidder so far, clearly mentioning for each contract, the name of organization, complete address, year of contract, contract value, date of contract award and date of contract completion.
d.	Reliability of quoted Brand & Country of Origin.	Provide supported documents like original brochures/technical literature depicting detailed specifications as well as complete contact details of the manufacturer i.e., Verifiable Office addresses, Telephone No., E-mail address for contacts.
e.	Bidder's corporate Status	Whether the Bidder firm is: Manufacturer / Authorized Distributors Note: Provide certificate/letter issued from manufacturer.
f.	Technical Resources & Services Support	Details of Bidder's ability / facility available for provision, installation, upgrading, training and after sales services.
g.	Warranty/Gua rantee	The Bidder shall offer 01-year warranty along with free of cost part replacement and after sale services. Warranty period will start from the date of installation.
h.	Consignment completion period	Bidder should specify the completion period from the date of issuance of Purchase / Work Order.

NOTE:

- Glassware should be of Pyrex, Class-A or Iwaki or equivalent.
- Import documents shall be verified at the time of delivery of items (where applicable).

5. PROFORMA OF TECHNICAL PROPOSAL PLANT AND MACHINERY

Sr. No.	Name of Equipment	Estimated Quantity (H)	Per Unit Cost (I)		nated J=(H*I)	Bid Security K=(J/100*2)
1.	Air Conditioner Wall Mount split type 1.5-ton inverter AC (Heat & Cool), self- cleaning feature (Dawlance or equivalent).	15	150,000	2	,250,000	45,000
2.	Generator perkins generator 100KVA or equivalent with installation	01	5,000,000	5	,000,000	100,000
Tota	l Estimated Cost with Taxes (PKR)		7,250,000			
Tota	l Bid Security (PKR)		145,000			

Notes:

- **1-** Evaluation formulated by the Procuring Agency shall be acceptable during whole executing period and supply shall be ensured as per approved sample and design in the procurement criteria.
- **2-** Prices of aforementioned Items must be filled on "**proforma of financial proposal**" and all pages should be duly signed and stamped.
- **3-** Proper required technical specification(s) and brand of all aforementioned Items must be quoted on proforma of Technical Proposal as well as on original letterhead of Bidder, failing which shall lead to disqualification.
- **4-** The quantities given in the Bidding Documents are estimated. The Procuring Agency is not bound to procure all Items as mentioned in the Bidding Documents.

6. PROFORMA OF FINANCIAL PROPOSAL PLANT AND MACHINERY

FIRM INFORMATION:	
Name of Firm:	N.T.N:
Postal/Temporarily Address:	
Permanent Address:	
Phone No.:	GST/PST REG. No:

Sr No	Name of Equipment	Estimated Quantity (L)	Per Unit Bid Price inclusive of all Taxes (M)	Total Cost with Taxes N=(L*M)
1.	Air Conditioner Wall Mount split type 1.5-ton inverter AC (Heat & Cool), self-cleaning feature (Dawlance or equivalent).	15		
2.	Generator perkins generator 100KVA or equivalent with installation	01		

NOTE:

- Rate must be quoted on this proforma otherwise Bid shall not be entertained.
- Specifications of all aforementioned Items are same as mentioned in Technical Form.

7. FIRM PROFILE

Sr. No.	Descriptions	Details
1.	Firm Name	
2.	Postal Address	
3.	Permanent Address	
4.	Nature of Business (Must Be approved from tax department at the time of registration) evidence must be provided.	
5.	Owner's Name	
6.	CNIC	
7.	Mobile Number	
8.	Valid NTN Number	
9.	CDR Number	
10.	CDR Date	
11.	Bid security (Yes/No)	
12.	Bid Fee (Yes/No)	

<u>Note: Ensure that</u> all details are attached and the columns of details are filled according to above mentioned sequence.

8. BID SUBMISSION FORM

To, Director General Punjab Food Authority 83-C New Muslim Town, Lahore Having examined the Bidding Documents, the receipt of which is hereby duly acknowledged and affirmed, the undersigned, offer to render [Project Title _____] 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 proforma of Financial Proposal attached herewith and made part of this Bid. We undertake, if our Bid is accepted, we ensure to provide the Items in accordance with the delivery schedule and the Agreement, and, prior to execution of the Agreement no right accrues. If our Bid is accepted, we shall obtain the guarantee of a bank in a sum equivalent to 10% percent of the Agreement Price for the due performance of the Contract, in the form prescribed/ required by the Procuring Agency. We agree to abide by this Bid for a period of 180 days from the date fixed for Bid opening or as required by Procuring Agency under relevant clause of the Bid validity, and it shall remain binding upon us and shall be accepted at any time before the expiration of that period. We further affirm that all the information/documents attached with the Bidding Documents are genuine/original/true copies and no document/information is fabricated or bogus. In any case of doubt and at any stage of procurement process or thereafter for the verification purpose the Procuring Agency has right to seek the clarification from the undersigned and call any document / record to authenticate/verification of the submitted documents from undersigned or any institution. We understand and no objection that Procuring Agency is not bound to accept the lowest or any received bid and may cancel the process at any time. Dated this _____ day of _____ 20___. [In the capacity of] [Signature]

Duly authorized to sign Bid for and on behalf

9. UNDERTAKING

FOR NON-DISCLOSURE OF INFORMATION

1.	With	reference	to	Items	required	by	Procur	ng	Agen	cy	for
							,	it	is	here	eby
	assever	rated and a	.cknowled	ged that	the confiden	itial/sens	sitive or	any	other	restric	ted
		_	· -	-	uring Agency	_	-			_	
		-		_	ırpose only. Th		_				
		_		-	nfidential data				_		-
	Procuri Agreem		ith any pe	rson/ kin	sman during o	r after th	e comple	tion/t	ermina	tion of	the
2.	If there	e is a requirer	nent for s	haring of	any informatio	n/data e	tc., relat	ed to 1	procuri	ng Agei	ncy
		-		•	rtment, entity	•			-	0 0	•
	etc., th	e undersigne	d Bidders	/Contract	tor shall not sl	hare any	informat	ion/d	ata wit	hout pr	rior
	permis	sion from the	competer	nt authori	ty of Procuring	g Agency,	for such	purpo	ose.		
3.	In case	e of any bread	ch related	to non-di	sclosure of dat	a, under	signed Bi	dders	/Contr	actor sl	nall
	be bou	nd to accept	the respo	nsibility a	and to pay any	damage	s/loss de	etermi	ned by	Procur	ing
				-	Procuring Age	-				-	
	_			_	s against the u	_				-	
	9				ersigned shall		the expe	enditu	res boi	ne by	the
	Procur	ing Agency in	relation t	o the coul	rt proceedings.						
4.	The ab	ove undertaki	ing is corr	ect and tr	ue to the best o	of my kno	owledge a	nd be	lief. We	have re	ead
			_		l accepted/sigi	•	_				
	influen	ce or pressur	e, coercio	n and witl	n my free cons	ent.					
	Name			Signatu	re						
	1101110_			Signatui	.~						

10. DOCUMENT CHECKLIST

Bidder should provide these and other documents if mention in the Bidding Documents:

SR.	DOCUMENTS REQUIRED	ATTACHED
1.	Bidding Documents Fee – evidence shall be pasted outside of the main envelope; the evidence shall be presented at the time of bid submission	
2.	Proforma of Technical Proposal	
3.	Valid Income Tax Registration Number (Status Active with FBR)	
4.	Valid GST/PST Registration Number (Status Active) 100% Compliance	
5.	Submission of undertaking on valid and attested E-stamp Paper of Rs. 200.	
6.	Professional Tax Certificate 2022-23 Must be With Challan Form	
7.	Years of establishment (From Registration date of NTN)	
8.	Bid Security (Original) attached with Technical Proposal	
9.	Signed and stamped Bidding Documents and all attachment documents	
10.	Proof of Relevant Experience	
11.	Bank statement from 01-09-2021 to 30-11-2022	
12.	The Bidder working with any Govt. Department /organization or the Bidder working with the Registered Private Companies (Provide work/Supply orders)	
13.	Undertaking for Non-Disclosure of Information	
14.	Bid Submission Form	
15.	Firm Detail Form	
16.	Performance Guarantee Form	
17.	Financial Proposal Form	
18.	Nature of Business (Must Be approved from tax department at the time of registration) evidence must be provided.	

Note: This checklist is made only for the use of Bidder to check/ confirm its documents attachment, which is not the part of the Bidding Documents. In case of any conflict between check list and Bidding Documents the words or figures/ statement given in Bidding Documents shall prevail.

Annexure A – Annual Development Program Agreement

ADP SCHEME AGREEMENT

BETWEEN

PUNJAB FOOD AUTHORITY

- and -

[THE CONTRACTOR]

RELATING TO [INSERT DESCRIPTION]

DATED [●]

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THIS ADP SCHEME AGREEMENT is made on [•], at Lahore, Pakistan.

BETWEEN:

- (1) **Punjab Food Authority,** a statutory body constituted pursuant to section 3 of the Punjab Food Authority Act, 2011, with its office located at 83-C, New Muslim Town, Lahore, Punjab, Pakistan ("**Procuring Agency**" which expression shall, unless excluded by or repugnant to the context, be deemed to include its successors in interest, administrators and permitted assigns); and
- (2) [INSERT NAME OF CONTRACTOR], [insert description of contractor (company, partnership etc.,] established under the Laws of Pakistan having place of business located at [●] (the "Contractor" which expression shall, unless excluded by or repugnant to the context, be deemed to include its successors in interest, administrators and permitted assigns).

RECITALS:

- (A) The Procuring Agency invited proposals from interested parties for the procurement of the Item pursuant to the RFP.
- (B) The Contractor was selected as the successful bidder for the Item in terms of the RFP and issued the letter of acceptance dated [INSERT DATE] by the Procuring Agency.
- (C) In accordance with the requirements of the RFP, the Parties are entering into this Agreement.
- (D) This Agreement sets out detailed terms and conditions on which the Contractor will supply Item in specified quantities to the Procuring Agency.

NOW THEREFORE, IN CONSIDERATION OF THE MUTUAL COVENANTS CONTAINED HEREIN, THE PARTIES AGREE AS FOLLOWS:

1. DEFINITIONS AND INTERPRETATION

1.1 Definitions

- 1.1.1 Except where the context requires otherwise, the capitalised terms used in this Agreement (including the recitals) shall have the following meanings:
 - "APD" means Annual Development Scheme.
 - "Agreement" means this ADP Scheme Agreement and all appendices hereto;
 - "**Authority**" means the Punjab Public Procurement Regulatory Authority, established under the PPRA Act;
 - **"Bid"** means the technical and financial proposal submitted by the Contractor in response to the RFP;
 - "Contractor" has the meaning given to it in the preamble;

"Corrupt Practice" has the meaning given to it in PPRA Act;

"**Delivery Acceptance Certificate**" means the certificate issued by the Inspection Committee in accordance with clause 4.2.2(a) following the inspection of an Item delivered;

"**Delivery Date**" has the meaning given to it in clause 4.1.2;

"**Delivery Point**" means delivery point as specified in the Purchase Order where the Item is to be delivered in accordance with this Agreement;

"**Delivery Rejection Certificate**" means the certificate issued by the Inspection Committee in accordance with clause 4.2.2(b) following the inspection of an Item delivered;

"Effective Date" means the date on which the Parties have signed this Agreement;

"Force Majeure Event" means any event beyond the reasonable control of a Party and which by the exercise of diligence and reasonable care could not be overcome by the affected Party such as strikes, lock-outs or other industrial disturbances (other than strikes by the staff of the Contractor), acts of war, wars whether declared or not, terrorism, blockades, insurrection, riots, landslides, earthquakes, storms, lightning, floods, civil disturbances, explosions or other acts of nature;

"Inspection Committee" means the committee notified by the Procuring Agency for inspection of Items;

"**Item**" means the item, as set out in appendix 1, to be supplied by the Contractor pursuant to the Purchase Order and in terms of this Agreement;

"**Item Price**" means the price of the Item quoted by the Contractor in its Bid as set out in appendix 1;

"Law" means all federal, provincial and local laws of Pakistan, and all orders, rules, regulations, executive orders, statutory regulatory orders, decrees, judicial decisions, notifications, or other similar directives issued by a competent authority in Pakistan, as any of them may be amended, substituted, replaced or re-promulgated from time to time;

"Non-Compliant Item" has the meaning given to it in clause 4.2.2(b);

"**Order Period**" means the period commencing from the Effective Date and expiring on the day ending on June 30, 2023;

"**Parties**" means collectively the Procuring Agency and the Contractor, and "**Party**" means any of them;

"Performance Guarantee" means an the irrevocable, unconditional and on-demand bank guarantee (and any replacement thereof), in favour of the Procuring Agency, in an amount equal to Pakistani Rupees [INSERT AMOUNT] only (PKR [INSERT AMOUNT]/-), issued by a scheduled bank in Pakistan acceptable to the Procuring Agency, in the form set out in appendix 3;

"Performance Guarantee Expiry Date" has the meaning given to it in clause 3.6.3;

"**PPRA Act**" means the Punjab Procurement Regulatory Authority Act, 2009 (including any amendments, modifications or any re-enactment thereof);

"PPR" means the Punjab Procurement Rules, 2014 framed under the PPRA Act (including any amendments, modifications or any re-enactment thereof);

"Procuring Agency" has the meaning given to it in the preamble;

"**Purchase Order**" means a purchase order in the form set out in appendix 2, issued by the Procuring Agency, during the Order Period, for the purchase of Item for the Item Price, in such quantities as specified therein;

"Release Certificate" means the certificate to be issued by the Procuring Agency, confirming, *inter alia*, that the Contractor has fulfilled its obligations under this Agreement including the Warranty Obligations;

"RFP" means the request for proposals document issued on [●] (as amended, varied or supplemented) issued by the Procuring Agency in terms of the PPR read with the PPRA Act;

"**Specifications**" means the specifications for the Item to be delivered by the Contractor, as specified in appendix 1;

"**Term**" means the period commencing from the Effective Date and expiring on the last day of the Warranty Period;

"Warranty Obligation" has the meaning given to it in clause 5.1.1; and

"Warranty Period" has the meaning given to it in clause 5.1.1.

1.2 Interpretation

- 1.2.1 In this Agreement, except where the context requires otherwise:
 - (a) words indicating one gender include all genders;
 - (b) words indicating the singular also include the plural and words indicating the plural also include the singular;

- (c) provisions including the word "agree", "agreed" or "agreement" require the agreement to be recorded in writing;
- (d) "written" or "in writing" means hand-written, type-written, printed or electronically made, and resulting in a permanent record;
- (e) references to clauses and appendices are, unless the context otherwise requires, references to clauses or appendices to this Agreement;
- (f) a reference to any legislation or legislative provision includes any statutory modification, amendment, or re-enactment of or legislative provision substituted for, and any subordinate legislation under that legislation or legislative provision;
- (g) unless otherwise provided herein, whenever a consent or approval is required by one Party from the other Party, such consent or approval shall not be unreasonably withheld or delayed;
- (h) except as provided in clause 9.4 (*Confidentiality*), nothing shall be construed or interpreted as limiting, diminishing or prejudicing in any way the rights of the Procuring Agency to claim any benefit provided under applicable Laws (whether in effect at the Singing Date or in the future);
- (i) headings shall not be taken into consideration in the interpretation of this Agreement;
- (j) the words "including", "includes" and any variants of those words will be read as if followed by the words "without limitation";
- (k) any reference to a party includes its respective successors in interest and permitted assigns, from time to time; and
- (l) a reference to business day(s) hereunder will be construed as a reference to a day on which banks are open for business in Punjab, Pakistan.

2. THE PROCURING AGENCY

2.1 Inspection Committee

- 2.1.1 The Inspection Committee shall carry out inspection of Item delivered by the Contractor pursuant to the Purchase Order, in accordance with the clause 4.2.
- 2.1.2 The Inspection Committee may require the Contractor to submit such information as it may deem necessary for the inspection of the Item to ensure that the Item delivered by the Contractor in the quantity as specified in the Purchase Order and meets the Specifications, and if so requested, the Contractor shall fully and without delay comply with such information request.

2.2 Instructions

2.2.1 During the Term, the Procuring Agency may issue to the Contractor, from time to time, such instructions as it deems fit to ensure the Contractor performs its obligations under this Agreement. Each such instruction shall be issued in writing and shall be binding on the Contractor.

2.3 Procuring Agency's Representative

- 2.3.1 The Procuring Agency shall designate one or more persons as its representative to act on its behalf under this Agreement and to perform such functions as may be delegated to it by Procuring Agency.
- 2.3.2 Unless and until the Procuring Agency notifies the Contractor otherwise, the Procuring Agency's representative shall be deemed to have the full authority of the Procuring Agency under this Agreement, except in respect of clause 6 or any right to amend this Agreement.
- 2.3.3 If the Procuring Agency wishes to replace any person appointed as its representative, the Procuring Agency shall give the Contractor not less than 3 days' notice of the replacement's name, address, duties and authority, and of the date of appointment.

3. THE CONTRACTOR

3.1 Contractor's General Obligations

- 3.1.1 The Contractor hereby covenants with the Procuring Agency that it shall:
 - (a) deliver the Item in such quantities as required in terms of the Purchase Order, within the timelines specified thereunder;
 - (b) ensure that the Item delivered in terms of the Purchase Order, meets the Specifications;
 - (c) replace the Item, rejected by the Inspection Committee, free of cost to the Procuring Agency within the revised delivery time as specified by the Procuring Agency;
 - (d) ensure that all consents, orders, authorizations, waivers, approvals and any other actions, or registrations, declarations or filings with, any person, board or body, public or private, that are required to be obtained by the Contractor in connection with the execution, delivery or performance of this Agreement will be obtained as and when required under the applicable laws (including Laws);
 - (e) obtain and maintain during the Term the relevant insurances for the Item as

may be required by the Procuring Agency;

- (f) comply with its obligations with regards to the installation of Item, supply of spare parts, training of staff of the Procuring Agency for the use of the Item, as may be specified in appendix 1, at its own costs; and
- (g) comply with all other obligations set out in this Agreement including its Warranty Obligation.
- 3.1.2 Any data or information received by the Contractor, from the Procuring Agency, its representative or the Inspection Committee or any approval or certification given to the Contractor from the Procuring Agency, shall not relieve the Contractor from its responsibility for delivery of Item in accordance with Purchase Order, as per the Specifications and shall not result in any increase in the Item Price.
- 3.1.3 The Contractor shall comply with applicable Laws for the delivery, inspection and installation of the Item.

3.2 Contractor's Representative

- 3.2.1 The Contractor shall appoint one or more persons as its representative, to act on behalf of the Contractor under this Agreement, having all authority necessary to act on the Contractor's behalf under this Agreement.
- 3.2.2 The Contractor shall not, without the prior consent of the Procuring Agency, revoke the appointment of its representative or appoint a replacement.
- 3.2.3 The Contractor's representative may, with prior notice to the Procuring Agency, delegate any powers, functions and authority to any competent person, and may at any time revoke the delegation.
- 3.2.4 The appointment of a representative by the Contractor shall not relieve the Contractor of its obligations under this Agreement.

3.3 Unforeseeable Difficulties

- 3.3.1 Except as otherwise stated in this Agreement:
 - (a) the Contractor shall be deemed to have obtained all necessary information as to potential risks, contingencies and other circumstances which may influence or affect its obligations under this Agreement;
 - (b) by signing this Agreement, the Contractor accepts total responsibility and risk for having foreseen all difficulties and costs for performing its obligations under this Agreement; and

(c) the Item Price shall not be adjusted to take account of any unforeseen difficulties or costs.

3.4 Submission of documents

3.4.1 With each quantity of the Item delivered in terms of the Purchase Order and this Agreement, the Contractor shall submit such information and documentation (including manuals, certification, comprehensive technical literature in original in English language, complete details of the manufacturer (i.e., verifiable official addresses, official website, telephone numbers, e-mail addresses of sales and customer support *etc.*) as may be necessary to instruct the Procuring Agency to use the Item.

3.5 Contractor's acknowledgements and undertakings

- 3.5.1 The Contractor acknowledges and confirms that:
 - (a) it has investigated, evaluated and considered all factors with regards to the supply of Item in accordance with this Agreement, and no claim whatsoever, including claims regarding extension of timeline or adjustment to Item Price, shall be entertained by the Procuring Agency.
 - (b) it has satisfied itself as to the correctness and sufficiency of the Item Price; and
 - (c) the Item Price covers all things necessary for the delivery and installation of the Item, as well as training of staff of the Procuring Agency for the use of the Item, as per the Specifications.

3.6 Performance Guarantee

- 3.6.1 Prior to the Effective Date, the Contractor shall deliver to the Procuring Agency the Performance Guarantee for proper performance by the Contractor of its obligations under this Agreement.
- 3.6.2 The Performance Guarantee shall be encashable in accordance with the terms thereof and shall be payable on the Procuring Agency's first written demand without any prior notice, reference or recourse to the Contractor for encashment.
- 3.6.3 The Contractor shall ensure that the Performance Guarantee is valid and enforceable (without further action) until date of issuance of Release Certificate. If the terms of the Performance Guarantee specify an expiry date (the "Performance Guarantee Expiry Date") and the Contractor has not received the Release Certificate by the date falling 28 days prior to the Performance Guarantee Expiry Date, the Contractor shall extend the validity of the Performance Guarantee, 28 days prior to the Performance Guarantee Expiry Date so as to keep it valid and enforceable up to the then anticipated date of issuance of Release Certificate as notified by the Procuring Agency.

- 3.6.4 The Procuring Agency shall be entitled to encash the Performance Guarantee in the event:
 - (a) of failure by the Contractor to keep the Performance Guarantee valid or extend the validity of the Performance Guarantee as described in clause 3.6.3;
 - (b) of failure by the Contractor to pay the Procuring Agency delay liquidated damages pursuant to clause 4.1.3 within 5 days after the date of the delivery of the relevant invoice to the Contractor;
 - (c) the Performance Guarantee issuing bank ceases to be a scheduled bank in Pakistan, and the Contractor is unable to provide a substitute Performance Guarantee in accordance with clause 3.6.6:
 - (d) failure by the Contractor to perform its obligations under this Agreement,;
 - (e) the Procuring Agency terminates this Agreement under clause 6, irrespective of whether notice of termination has been given; and / or
 - (f) any other event, circumstance or provision stated under this Agreement which entitles the Procuring Agency to encash the Performance Guarantee.
- 3.6.5 The Procuring Agency shall return the Performance Guarantee to the Contractor within 28 days after the issuance of Release Certificate provided that, no event is subsisting that entitles the Procuring Agency to make a demand under the Performance Guarantee, nor are there any outstanding claims by the Procuring Agency under the Performance Guarantee.
- 3.6.6 Where, at any time subsequent to the issuance of the Performance Guarantee, the Performance Guarantee issuing bank ceases to be a scheduled bank, then, upon the instructions of the Procuring Agency, the Contractor shall within 7 days of receipt of such instructions from the Procuring Agency, procure from a scheduled bank in Pakistan acceptable to the Procuring Agency a substitute Performance Guarantee. Upon receipt of such substitute Performance Guarantee in the form and substance satisfactory to the Procuring Agency, the Procuring Agency shall return the earlier issued Performance Guarantee to the Contractor.

3.7 Contractor's Representations and Warranties

- 3.7.1 The Contractor represents and warrants to the Procuring Agency that:
 - (a) it has all requisite power and authority to conduct its business and to execute, to deliver and to perform its obligations under this Agreement;
 - (b) there are no proceedings pending, or to the best of its knowledge, threatened

for the liquidation or bankruptcy of the Contractor or that could materially adversely affect the performance by the Contractor of its obligations under this Agreement;

- (c) this Agreement has been duly authorised, executed and delivered by it and constitutes its legal, valid and binding obligation;
- (d) the execution and delivery of, and performance of its obligations under this Agreement by the Contractor does not and, will not constitute a violation of any statute, judgment, order, decree or regulation or rule of any court, governmental authority or arbitrator of competent jurisdiction applicable or relating to it, its assets or its businesses; and
- (e) it has adequate expertise and personnel to comply with its obligations under this Agreement.

4. DELIVERY, INSPECTION AND PAYMENTS

4.1 Delivery of Item

- 4.1.1 During the Order Period, the Procuring Agency shall from time to time, issue Purchase Orders for the purchase of Item in such quantities as may be specified therein.
- 4.1.2 The Contractor shall be liable to deliver the Item in such quantities at the Delivery Point within the timelines specified in the Purchase Order (the "**Delivery Date**"). Days will be counted immediately from the date of issuance of the relevant Purchase Order.
- 4.1.3 In case of any delay in delivery, late delivery charges at the rate of 0.067% of the total cost of the relevant Purchase Order, shall be levied every day beyond the Delivery Date, subject to maximum of 10% of the total amount specified in the Purchase Order. The Procuring Agency shall not be restricted from invoicing for such claimable amounts after the relevant Delivery Date.
- 4.1.4 The amounts specified in clause 4.1.3 have been calculated as representing the actual daily loss to the Procuring Agency for each day of delay, and constitute liquidated damages and are not a penalty. The Contractor waives, any defense as to the validity and quantum of any liquidated damages in this Agreement on the grounds that such liquidated damages are void as penalties or as not being reflective of the actual loss suffered by the Contractor.
- 4.1.5 The Contractor shall be responsible for delivering the Item at the Delivery Point, in compliance with the Specifications.

- 4.1.6 The Item shall be imported in the name of the Procuring Agency and shall, to the extent consistent with the applicable Laws, become the property of the Procuring Agency upon the receipt of payment by the Contractor against the same.
- 4.1.7 The Contractor warrants good title to Item delivered by the Contractor. The Contractor further guarantees that such title, when it passes to and vests in the Procuring Agency, will be free and clear of any and all liens, claims, charges, security interests, encumbrances and rights of other persons arising as a result of any actions or failure to act by the Contractor.
- 4.1.8 The Contractor shall be responsible for the payment of all fees, royalties and other charges, if any, that may be payable under the terms of any license or permission in respect of any patent rights, design, trademark, copyright or trade name, intellectual property right or other protected right relating to the manufacture, use and supply of the Item under this Agreement and the use thereof by the Procuring Agency. If any patent or another industrial right is infringed, the Contractor shall procure for the Procuring Agency the right (free of cost) of utilization either by modification to the effect that it is free of any third party's right or by procuring the third party's authorization of utilization.
- 4.1.9 The Contractor shall indemnify and hold harmless the Procuring Agency and its representatives, against and from all claims, damages, losses and expenses (including any legal fees) that may be incurred by the Procuring Agency with regards to any patent rights, design, trademark, copyright or trade name, intellectual property right or other protected right relating to the manufacture, use and supply of the Item under this Agreement and the use thereof by the Procuring Agency. In the event of any claim being made or proceeding instituted against the Procuring Agency to which clause 4.1.9 applies, the Procuring Agency shall promptly notify the Contractor thereof and the Contractor shall, at its own cost, deal with such claim or conduct such proceedings and settle such claims and any litigation or arbitration that may arise from it.

4.2 Inspection of Items

- 4.2.1 Upon delivery of the Item at the Delivery Point, the Inspection Committee shall inspect the Item, along with the relevant documentation (if any) with respect to the Item, to ensure that the Item meets the Specifications.
- 4.2.2 Following inspection of the Item, the Inspection Committee shall either:
 - (a) issue a Delivery Acceptance Certificate, verifying that the Item is in the required quantity as specified in the Purchase Order and complies with the Specifications; or
 - (b) issue Delivery Rejection Certificate, if the Inspection Committee determines (along with providing the reasons for rejection) that the Item is not in the required quantity as specified in the Purchase Order and / or does not

comply with the Specifications ("Non-Compliant Item").

- 4.2.3 In the event of issuance of a Delivery Rejection Certificate, the Contractor shall replace the Non-Compliant Item within the time period as specified in the Delivery Rejection Certificate (or such other period as agreed between the Parties). Thereafter, the inspection procedure set out in clause 4.2.2 shall be repeated for the Non-Compliant Item and the Delivery Acceptance Certificate shall be issued once the relevant Item is accepted in accordance with clause 4.2.2(a).
- 4.2.4 Any defect or deficiency in the Non-Compliant Item shall be remedied by the Contractor, at its sole cost and risk.
- 4.2.5 Prior to the delivery of the Item, the Inspection Committee (or its representative) shall have the right to:
 - (a) inspect the Item at the place of manufacture or at the location where the Item will be shipped from; or
 - (b) if applicable, attend factory acceptance tests for the Item, or at its option, review the results of any factory acceptance tests already performed.

The Contractor shall ensure the Inspection Committee (or its representative) is given unhindered access and rights to carry out its duties assigned by the Procuring Agency and shall give timely notices to the Inspection Committee (or its representative) to witness all tests carried out in respect of the Item.

4.2.6 The Contractor shall be liable to bear all expenses and costs that may be incurred for the inspection of the Item by the Inspection Committee (or its representative).

4.3 Payment for Items

- 4.3.1 After the issuance of the Delivery Acceptance Certificate, the Contractor shall be entitled to submit an invoice to the Procuring Agency in respect of the Item for which the Delivery Acceptance Certificate has been issued.
- 4.3.2 The Contractor's invoice shall specify the Item, its quantity delivered and its relevant amount as set out in the Purchase Order, and shall be supported with a copy of the Delivery Acceptance Certificate, including such other documentation and / or information as may be required by the Procuring Agency.
- 4.3.3 Upon verification by the Procuring Agency of the invoice and the documentation / information submitted by the Contractor in terms of clause 4.3.1 and clause 4.3.2, the Procuring Agency shall make the relevant payment to the Contractor, subject to availability of budget, within 30 days thereafter.
- 4.3.4 The mode of payment shall be determined by the Procuring Agency at the time of making the relevant payment.

- 4.3.5 No payment shall be made in advance or against partial deliveries.
- 4.3.6 All payments shall be subject to any and all taxes, duties and levies applicable under the laws of Pakistan.
- 4.3.7 The Contractor shall not charge prices for the Item varying from the Item Price as specified in the Purchase Order.
- 4.3.8 The Procuring Agency shall be under no obligation to purchase the Item from the Contractor. Where the Procuring Agency elects to purchase the Item from the Contactor, the Procuring Agency may purchase from time to time such quantities of the Item as it deems necessary during the Order Period upto the maximum quantity of the Item set out in appendix 1. The Parties may mutually agree to increase such maximum quantities subject to compliance with applicable Laws.
- 4.3.9 The Contactor confirms that the Item Price shall not be changed for whatsoever reason throughout the Term.

5. WARRANTY PERIOD AND RELEASE CERTIFICATE

5.1 Warranty Period

- 5.1.1 The warranty period in respect of the Item for which the Delivery Acceptance Certificate has been issued in accordance with this Agreement, shall be as specified in appendix 1, provided that the Warranty Period shall stand renewed any time the Contractor, in compliance with its Warranty Obligation, is required to replace the Item (the "Warranty Period"). During the Warranty Period, the Contractor shall, at its own costs, be liable to make good (within such time as reasonably determined by the Procuring Agency) any defect or deficiency in respect of the Item (including replacement thereof), as may be notified from time to time by the Procuring Agency and, in each case, to the satisfaction of the Procuring Agency (the "Warranty Obligation").
- 5.1.2 If, in the sole opinion of the Procuring Agency, any defect or deficiency appears or damage occurs to the Item during its Warranty Period, the Procuring Agency shall notify the Contractor. The Procuring Agency's omission to do so shall not relieve the Contractor from Warranty Obligation in respect of the Item within the relevant Warranty Period.
- 5.1.3 In the event the Contractor fails to fulfill its obligations during the Warranty Period in respect of the Item, the Procuring Agency shall be entitled to make a claim under the Performance Guarantee.

5.2 Release Certificate

5.2.1 Upon the expiry of the Warranty Period for the Item supplied by the Contractor

pursuant to the last Purchase Order, the Contractor may apply by notice to the Procuring Agency for the issuance of Release Certificate.

- 5.2.2 The Procuring Agency shall, within 7 days after receiving the Contractor's application:
 - (a) issue the Release Certificate to the Contractor; or
 - (b) reject the application, giving reasons and specifying the work required to be done by the Contractor to enable the Release Certificate to be issued. The Contractor shall then complete such works before issuing a further notice under clause 5.2.2.
- 5.2.3 This Agreement shall not be considered to be completed until the Release Certificate has been signed by the Procuring Agency and delivered to the Contractor, stating the date on which all obligations of the Contractor under this Agreement have been completed.

6. TERMINATION AND BLACKLISTING

6.1 Termination for Default

- 6.1.1 The Procuring Agency, without prejudice to any other remedy for breach of contract under Law, by written notice to the Contractor, may terminate this Agreement:
 - (a) if the Contractor fails to deliver the Item as per the Purchase Order within the specified period(s), or within any extension thereof granted by the Procuring Agency;
 - (b) if the Contractor fails to perform any other obligation(s) under this Agreement;
 - (c) if the Contractor fails to furnish, keep valid, enhance and maintain in full effect the Performance Guarantee in accordance with this Agreement;
 - (d) any material ligation is commenced against the Contractor which materially impacts its performance of this Agreement;
 - (e) any statement, representation or warranty by the Contractor in this Agreement or in any certificate or other instrument provided by the Contractor in connection herewith proves to have been incorrect, in any material respect, when made or when deemed to have been made and such failure or incorrect statement, representation or warranty is likely to have a material and adverse effect on the rights or obligations of the Procuring Agency hereunder or on the Contractor's ability to perform its obligations under this Agreement; or
 - (f) if the Contractor, in the judgment of the Procuring Agency, has engaged in Corrupt Practices.

As soon as practicable after issuance of a notice of termination under clause 6.1.1, the Procuring Agency shall determine whether any sums are due and payable to the Contractor in terms of this Agreement, for the obligations which the Procuring Agency considers have been completed in accordance with this Agreement. After deducting amounts representing any losses, damages and extra costs that may have been incurred by the Procuring Agency, the Procuring Agency shall pay any balance due to the Contractor.

6.2 Termination for Insolvency

6.2.1 The Procuring Agency may at any time terminate this Agreement by giving written notice to the Contractor, if the Contractor becomes bankrupt or otherwise insolvent. In such event, termination will be without compensation to the Contractor, 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.

6.3 Termination for Convenience

- 6.3.1 The Procuring Agency may at its absolute discretion and at any time, terminate this Agreement for convenience by giving at least 15 days' notice to the Contractor, whereupon this Agreement shall terminate on the date of termination specified therein.
- 6.3.2 In the event of termination of this Agreement pursuant to clause 6.3.1, the provisions of clause 6.1.2 shall apply.

6.4 Blacklisting Mechanism

- 6.4.1 The Procuring Agency may, in terms of the PPR read with PPRA Act, for a specified period, debar the Contractor from participating in any public procurement, if the Procuring Agency determines that the Contractor has:
 - (a) acted in a manner detrimental to the public interest or good practices;
 - (b) consistently failed to perform its obligation under this Agreement; or
 - (c) indulged in any Corrupt Practice.
- 6.4.2 If Procuring Agency debars a Contractor, the Procuring Agency:
 - (a) shall forward the decision to the Authority for publication on its website; and
 - (b) may request the Authority to debar the Contractor for procurement of all "procuring agencies" as defined in the PPRA Act.

7. FORCE MAJEURE

- **7.1** If either Party considers that a Force Majeure Event has occurred which may affect performance of its obligations under this Agreement, it shall promptly notify the other Party giving details of the nature, the probable duration and the likely effect of the Force Majeure Event within 7 days of its occurrence.
- 7.2 Provided a notice has been duly given by the affected Party in accordance with clause 7.1, then during the duration of any Force Majeure Event, neither Party will be responsible or liable to the other for any failure or delay in performance of its obligations or be deemed to be in breach of this Agreement, to the extent that such failure or delay is caused by a Force Majeure Event.
- **7.3** The affected Party shall give notice to the other Party when it ceases to be affected by the Force Majeure Event.
- 7.4 The affected Party will use all reasonable efforts and will ensure that it uses all reasonable efforts to mitigate the effects of a Force Majeure Event. The affected Party will continue to perform its obligations under this Agreement as far as it is reasonably practical and will seek all reasonable alternative means for performance of its obligations not prevented by the Force Majeure Event.
- 7.5 In case of occurrence of a Force Majeure Event, provided that the Contractor is in compliance with its other obligations under the Agreement, the Contractor, in the sole determination of the Procuring Agency:
 - (a) shall not be liable for any failure or delay in performing its obligations under or pursuant to this Agreement during the existence of such Force Majeure Event; and
 - (b) shall be entitled to an extension to any timelines under this Agreement, provided, that (i) in no event shall the Term be extended and (ii) no relief, including without limitation the extension relevant timelines, shall be granted to the Contractor to the extent that such failure or delay would have nevertheless been experienced by the Contractor had the Force Majeure Event not occurred or that such failure or delay was caused by the failure of the Contractor to comply with its obligations under this Agreement.
- **7.6** If a Force Majeure Event occurs which continues for a period exceeding 60 consecutive days, the Procuring Agency may give to the Contractor a notice of termination of this Agreement which shall take effect 30 days after the giving of the notice.

8. DISPUTE RESOLUTION

8.1 Amicable Settlement

8.1.1 The Parties agree to attempt to resolve any dispute arising under this Agreement promptly, amicably and in good faith. Each Party shall designate a representative who shall be entitled to enter into discussions to resolve by amicable agreement any

dispute in connection with this Agreement.

8.2 Arbitration

- 8.2.1 Any dispute arising out of or in connection with this Agreement that has not been resolved amicably in accordance with clause 8.1.1, shall be settled by arbitration in accordance with the Arbitration Act, 1940 (as amended, supplemented or modified), by Secretary Food, Government of Punjab.
- 8.2.2 The arbitration proceedings, and the award shall be rendered in the English language.
- 8.2.3 The arbitration shall be conducted in Lahore, Pakistan. Except as awarded by Secretary Food, Government of Punjab, each Party shall be responsible for its own costs incurred by it in connection with an arbitration hereunder.
- 8.2.4 The decision of Secretary Food, Government of Punjab shall be final and binding upon the Parties. Judgment upon the award rendered by Secretary Food, Government of Punjab, may be entered in any court of competent jurisdiction. The Party in whose favor the award is given may enforce such award or judgment in any jurisdiction, including any jurisdiction where the other Party's assets may be located.

8.3 Performance to Continue During Dispute

8.3.1 Notwithstanding any reference of a dispute to the amicable settlement or arbitration herein, the Parties shall (to the extent practicable) continue to perform their respective obligations under this Agreement unless they otherwise agree.

9. MISCELLANEOUS

9.1 Communications

- 9.1.1 Except as expressly provided in this Agreement, every certificate, notice, instruction, direction, order, consent or decision to be given under this Agreement shall be given in writing to the respective addressee at the corresponding address specified below (or such other address and / or addressee as the Parties may notify to each other) in writing upon 07 days advance notice and shall be effective when received) and shall be deemed effective as follows:
 - (a) if delivered personally, upon delivery;
 - (b) if sent by post, upon certified receipt;
 - (c) if sent by a courier service, upon receipt;
 - (d) if sent by e-mail, upon a returned receipt.

9.1.2 If to Contractor:

Address: [●]
Tel.: [●]
Email: [●]
Attention: [●]

If to Procuring Agency:

Address: [●]
Tel.: [●]
Email: [●]
Attention:[●]

9.2 Law and Language

- 9.2.1 This Agreement shall be governed by and construed in accordance with the laws of Pakistan.
- 9.2.2 If there are versions of any part of this Agreement which are written in more than one language, the English language version shall prevail.
- 9.2.3 The language for all communications, documents, equipment interface and signage to be provided or required under this Agreement shall be English. The Contractor shall not be entitled to an extension of time, or to any costs incurred in each case for arranging English language translations for any communications, documents, equipment interface and signage to be provided or required under this Agreement.

9.3 Assignment

9.3.1 The Contractor shall not be entitled to assign, either in whole or in part, any of its rights and obligations under this Agreement to any party without the prior written consent of the Procuring Agency.

9.4 Confidentiality

- 9.4.1 The Contractor shall hold (and shall procure that its representatives shall hold) in confidence all documents and other information whether technical or commercial supplied to it by or on behalf of the Procuring Agency and all information and documents obtained by it in the course of any inspection performed in accordance with the terms of this Agreement, and shall not, save as required by Law, publish or otherwise disclose or use the same for its own purposes otherwise than as may be required to perform its obligations under this Agreement.
- 9.4.2 The provisions set out in clause 9.4.1 shall not apply to:

- (a) any information in the public domain otherwise than by breach of this Agreement;
- (b) information in the possession of the Contractor before divulgence as aforesaid, and which was not obtained under any obligation of confidentiality; and
- (c) information obtained from a third party who is free to divulge the same, and which is not obtained under any obligation of confidentiality.

9.5 Compliance with Laws

- 9.5.1 The Contractor shall, in performing its obligations under this Agreement, comply with all applicable Laws. Unless otherwise stated in this Agreement (including the Specifications):
 - (a) the Contractor shall bear costs of stamp duties and similar charges (if any) imposed by laws in Pakistan in connection with entry into this Agreement;
 - (b) the Contractor shall obtain and maintain all necessary consents and approvals as may be required for performing its obligations under this Agreement; and
 - (c) any fines imposed upon or other penalties incurred by the Contractor for noncompliance with the applicable laws (including Laws) or other actions taken pursuant thereto (including in relation to any consents and approvals) shall not be reimbursed by the Procuring Agency but shall be the sole responsibility of the Contractor.

9.6 No Liability for Review

9.6.1 No review, non-objection, approval or acceptance by the Procuring Agency (or the Inspection Committee) of any agreement, document or instrument proposed by the Contractor shall relieve the Contractor from any liability that it would otherwise have had in the preparation of such agreement, document, instrument, or failure to comply with applicable laws (including Laws) or to satisfy its obligations under this Agreement, except as otherwise specified in this Agreement. The Procuring Agency (or the Inspection Committee) is not liable to the Contractor or any other person by reason of its review, non-objection, approval or acceptance of any agreement, document or instrument, except as otherwise specified in this Agreement.

9.7 No Waiver

- 9.7.1 No waiver by either Party of any default or defaults by the other Party in the performance of any of the provisions of this Agreement:
 - (a) shall operate or be construed as a waiver of any other or further default or

defaults whether of a like or different character; or

- (b) shall be effective unless in writing duly executed by a duly authorised representative of such Party; or
- (c) the waiver of any breach or failure to enforce any of the terms, covenants or conditions of this Agreement shall not in any way affect, limit, modify or waive the future enforcement of such terms, covenants or conditions.
- 9.7.2 Neither the failure by either Party to insist on any occasion upon the performance of the terms, conditions and provisions of this Agreement, nor time or other indulgence granted by one Party to the other shall act as a waiver of such breach or acceptance of any variation or the relinquishment of any such right or any other right hereunder, which shall remain in full force and effect.

9.8 Relationship of the Parties

9.8.1 This Agreement shall not be interpreted or construed to create an association, joint venture, or partnership between the Parties or to impose any partnership obligation or liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

9.9 Survival

9.9.1 Cancellation, expiration or earlier termination of this Agreement shall not relieve the Parties of obligations that by their nature should survive such cancellation, expiration or termination, including, without limitation, warranties, remedies, promises of indemnity and confidentiality.

9.10 Affirmation

9.10.1 The Contractor declares and affirms that it has not paid nor has it undertaken to pay and that it shall in the future not pay any bribe, pay-offs, kick-backs or unlawful commission and that it has not in any other way or manner paid any sums, whether in Pakistani currency or foreign currency and whether in Pakistan or abroad, or in any other manner given or offered to give any gifts and presents in Pakistan or abroad to any person or company to procure this Agreement, and the Contractor undertakes not to engage in any of the said or similar acts during the term of and relative to this Agreement.

9.11 Priority of Documents

9.11.1 The documents forming this Agreement are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence:

- (a) this Agreement (other than the appendices);
- (b) the Specifications;
- (c) the appendices (other than those mentioned above);
- (d) the Bid; and
- (e) any other documents forming part of this Agreement.

9.12 Agreement Modification

9.12.1 No oral or written modification of this Agreement, either, before or after its execution, shall be of any force or effect unless such modification is in writing and signed by the Parties.

9.13 Severability

9.13.1 In the event of any part of this Agreement being ineffective, such part shall be deemed to be severed and the validity of the remaining portion shall not be affected, provided such ineffectiveness is without prejudice to the essence of this Agreement. Notwithstanding, the provisions of the preceding sentence, should any term or provision of this Agreement be found to be invalid by any relevant authority having jurisdiction thereof, the Procuring Agency shall immediately take such steps as it may deem necessary to eliminate such invalidity.

9.14 Limitation of Liability

9.14.1 No Party shall be liable to the other in contract, tort, warranty, strict liability, or any other legal theory for any indirect, consequential, incidental, punitive, or exemplary damages, except as expressly provided herein.

9.15 Indemnity

9.15.1 The Contractor shall indemnify and hold harmless the Procuring Agency, its representatives and the Inspection Committee, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of any loss or bodily injury, sickness, disease or death, which is attributable to any negligence, willful act or breach of this Agreement by the Contractor or its representatives.

APPENDIX 1 - ITEM

[Insert the table setting out the Item for which this Agreement is to be executed. Please ensure that for the Item, the maximum quantity, Specifications, Item Price (as per Bid) as well as Warranty Period have each been specified]

Sr.	Item	Item Price	Maximum	Specifications	Warranty
No.			Quantity		Period

APPENDIX 2 - FORM OF PURCHASE ORDER



No. DG(PFA)/AD(P)/2022/	
OFFICE OF DIRECTOR GENERAL	_
PUNJAB FOOD AUTHORITY	
83-C, New Muslim Town, Lahore.	

Dated:		
Daillu.		

To,

M/S Contractor Name, Contractor Postal Address.

Subject: **SUPPLY ORDER**

With reference to the technical and financial Bid opening of (ADP Scheme Agreement 2022-23) under the guidelines of PPRA rule-38(2), being a lowest evaluated Bidder, your Bid for the supply of below-mentioned Item(s) has been accepted by Procuring Agency with the below-mentioned terms and conditions:

Sr.#	Description of Items.	QTY	Contractor Name	
			Rate	Total
1.				
2.				
3.				
4.				
5.				
6.				
7.	TOTAL WITH ALL APPLICABLE TAXES			

Terms & Conditions:

- You are hereby directed to deliver the aforementioned Items(s) within 30 days from the issuance of purchase order as per specification.
- You are directed to please coordinate with the official/officer to conduct the acceptance tests with in the stipulated delivery period.

- The stamp duty @ 0.25% of the Contract Price will be deposited by you within seven (07) days of the issuance of purchase order.
- In case of any delay, late delivery charges @ 0.067% of the total cost of the relevant Purchase Order shall be levied every day beyond the stipulated time of delivery, subject to maximum 10% of the cost of relevant Purchase Order.
- Any deviation from the specification shall be deemed as violation of Bidding Documents and you'll be bound to replace the delivered Items as per specification.
- The rates accepted are inclusive of all taxes and duties payable by the contractor as per law.
- Income tax/PST/GST will be deducted at source as per rule applicable.
- Payment will be made upon provision of delivery challan and inspection carried out by the concerned or nominated officer.

ASSISTANT DIRECTOR (PROCUREMENT) PUNJAB FOOD AUTHORITY

C.C:

- 1. ADG (Admin & Finance), Punjab Food Authority.
- 2. Deputy Director (Admin), Punjab Food Authority.
- 3. PA to Worthy Director General, Punjab Food Authority.
- 4. Store Keeper, Punjab Food Authority, Lahore.
- 5. Office Copy.

APPENDIX 3 - FORM OF PERFORMANCE GUARANTEE

To,	
Director General Punjab Food Authority 83-C New Muslim Town, Lahore	
	einafter called "the Contractor") has undertaken, number of the contract] datedreinafter called the "Agreement").
Contractor shall furnish you with a bank gu	lated by you in the said Agreement that the arantee by a schedule bank for the sum specified ecurity for compliance with the Contractor's the Agreement.
AND WHEREAS we have agreed to gi	ve the Contractor a guarantee:
behalf of the Contractor, for the sum of PK to pay to the you, upon your first written d under the Agreement and without cavil or	we are Guarantors and responsible to you, on R (in figures) (inwards) and undertake emand declaring the Contractor to be in default argument, any sum or sums within the limits of at your needing to prove or to show grounds or
This guarantee is valid until the	_ day of20
SIGNATURE AND SEAL OF GUARANTORS	<u>8</u>
Name:	_ CNIC:
Designation:	Date:
Signature/Seal:	

SIGNATURE PAGES

IN WITNESS WHEREOF, the Parties, intending to be legally bound, have caused this Agreement to be executed by their duly authorised representatives as of the date first written above.

PUNJAB FOOD AUTHORITY

Signature	
Name (block conitals)	
Name (block capitals)	
Title	
In the presence of:	
Witness signature	
Witness name	
(block capitals)	
Witness signature	
Witness name	
(block capitals)	

[NAME OF CONTRACTOR]

Signature	
Name (block capitals)	
Title	
In the presence of:	
Witness signature	
Witness name	
(block capitals)	
Witness signature	
Witness name	
(block capitals)	