

<u>GOVERNMENT OF KHYBER PAKHTUNKHWA</u> <u>HEALTH DEPARTMENT</u>

PROJECT DIRECTOR ESTABLISHMENT OF FOOD AND DRUG TESTING LABORATORIES

Directorate General Drugs Control & Pharmacy Services, Khyber Pakhtunkhwa Peshawar (DG, DC & PS)

BID SOLICITATION DOCUMENTS (BSD) FOR NATIONAL COMPETITIVE BIDDING (NCB) PAKISTAN, FOR PROCUREMENT OF EQUIPMENT / INSTRUMENTS / GLASSWARES / INFORMATION, COMMUNICATION & TECHNOLOGY (ICT) EQUIPMENT AND OTHERS FOR ESTABLISHMENT OF PROVINCIAL FOOD AND DRUGS TESTING LABORATORIES PESHAWAR, FY 2024-25

REVISED (AFTER PRE-BID) BID SOLICITATION DOCUMENTS

JULY 2024 FOR FINANCIAL YEAR 2024-25

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PREFACE

These Bidding Documents have been prepared for use by Procuring Entities and their implementing agencies in the procurement of Goods through National Competitive Bidding (NCBs) under Rule (06) KPPRA Rules 2014. These SBDs are prepared for Rate Contract under Government of Khyber Pakhtunkhwa District Govt. Rules of Business 2015, 2nd Schedule Rule 3 (2), and Serial No.11 (Health) Sub-rule xiii for procurement of Equipment and will result in agreement with the successful bidder.

In order to simplify the preparation of bidding documents for all procurement, the Bidding Documents are grouped in two parts based on provisions, which would remain the same for all the related procurements and that which are specific for each procurement Provisions, which are intended to be used un-changed are in **Part one**, which includes

Section I, Instructions to Bidders (ITB), and

Section II, General Conditions of Contract (GCC).

Data and provisions specific to each procurement and contract are included in <u>Part. Two</u> which is further organized into six sections. Sections I, II, III, IV, and V, respectively contain Invitation for Bids; Bid Data Sheet; Special Conditions of Contract; Schedule of Requirements; Technical Specifications; and the forms to be used, while Section VI is about Sample Forms.

This is Part one, which is fixed and contains provisions, which are to be used, unchanged. Each section is prepared with notes intended only as information for the Procuring agency or the person drafting the bidding documents. They shall not be included in the final documents.

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INSTRUCTIONS TO BIDDERS

A. Introduction			
1. Source of Funds	1.1	The Procuring Entity has received Provincial Government funds from the source(s) indicated in the bidding data in various currencies towards the cost of the project /schemes specified in the bidding data and it is intended that part of the proceeds of this loan/grant/funds/ will be applied to eligible payments under the contract for which these bidding documents are issued.	
	1.2	The funds referred to above in addition shall be "Public Fund" which according to 2 (1) (1) of KPP Rules 2014 means:	
		(i) Provincial Consolidated Fund; (ii) foreign assistance; (iii) all moneys Standing in the Public Account; and (iv) Funds of enterprises wholly or partly owned or managed or controlled by Government.	
	1.3	Payment by the Fund will be made only at the request of the Procuring Entity and upon approval by the Government of Khyber Pakhtunkhwa, and in case of a project will be subject in all respect to the terms and conditions of the agreement. The Project Agreement prohibits a withdrawal from the allocated fund account for the purpose of any payment to persons or entities, or for any import of goods, if such payment or import, to the knowledge of the Federal Government/ Khyber Pakhtunkhwa Government, is prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations. No party other than the Procuring Entity shall derive any rights from the Project Agreement or have any claim to the allocated fund proceeds.	
2. Eligible Bidders	2.1	This Invitation for Bids is open to all eligible bidders/ Original Manufacturer/ Authorized 3S Dealer of the Original manufacturer. Proprietorship of a well-established Authorized dealer of the original manufacturer / 3S automobile dealership is must	
	2.2	Bidders should not be associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Procuring Entity to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods to be purchased under this Invitation for Bids.	
	2.3	Government-owned enterprises in the Province of Khyber Pakhtunkhwa may participate only if they are legally and financially autonomous, if they operate under commercial law, and if they are not a dependent Entity of the Government of Khyber Pakhtunkhwa.	
	2.4	Bidders shall not be eligible to bid if they are under a declaration of ineligibility for corrupt and fraudulent practices issued by any government organization in accordance with the Rule 44(1) KPP Rules 2014.	

3. Eligible Goods and Services	3.1	All goods and related services to be supplied under the contract shall have their origin in eligible source countries of the world with whom the Islamic Republic of Pakistan has commercial relations and its Bidding Documents and all expenditures made under the contract will be limited to such goods and services.
	3.2	For purposes of this clause, "origin" means the place where the goods are mined, grown, or produced, or the place from which the related services are supplied. Goods are produced when, through manufacturing, processing, or substantial and major assembly of components, a commercially recognized product results that is substantially different in basic characteristics or in purpose or utility from its components.
	3.3	The origin of goods and services is distinct from the nationality of the Bidder.
4. Cost of Bidding	4.1	The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Procuring Entity named in the Bid Data Sheet, hereinafter referred to as "the Procuring Entity," will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
		B. The Bidding Documents
5. Content of Bidding Documents	5.1	The bidding documents include: a) Instructions to Bidders (ITB) b) Bid Data Sheet (BDS) c) General Conditions of Contract (GCC) d) Special Conditions of Contract (SCC) e) Schedule of Requirements (SOR) f) Technical Specifications g) Bid Form and Price Schedules h) Bid Security Form i) Contract Form j) Performance Security Form k) Manufacturer's Authorization Form The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or to submit a bid not substantially responsive to the bidding documents in every respect will be at the Bidder's risk and may result in the rejection of its bid.

6. Clarificationof Bidding Documents	6.1	An interested Bidder requiring any clarification of the bidding documents may notify the Procuring Entity in writing. The Bidding Procuring Entity will respond in writing to any request for Document's clarification of the bidding documents which it receives no later than three working days prior to the deadline for the submission of bids prescribed in the Bid Data Sheet. Written copies of the Procuring Entity's response (including an explanation of the query but without identifying the source of inquiry) will be sent to all interested bidders that have received the bidding documents.
7. Amendment of Bidding Documents	7.1	At any time prior to the deadline for submission of bids, the Procuring Entity, for any reason, whether at its own initiative or in response to a clarification requested by an interested Bidder, may modify the bidding documents by amendment.
	7.2	All interested bidders that have received the bidding documents will be notified of the amendment in writing, and will be binding on them.
	7.3	In order to allow interested bidders reasonable time in which to take the amendment into account in preparing their bids, the Procuring Entity, at its discretion, may extend the deadline for the submission of bids.
		C. Preparation of Bids
8. Language of Bid	8.1	The bid prepared by the Bidder, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Procuring Entity shall be written in the language specified in the Bid Data Sheet. Supporting documents and printed literature furnished by the Bidder may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language specified in the Bid Data Sheet, in which case, for purposes of interpretation of the Bid, the translation shall govern.
9.Documents Comprising the Bid	9.1	 The bid prepared by the Bidder shall comprise the following components: a) A Bid Form and a Price Schedule completed in accordance with ITB Clauses 10, 11, and 12. b) Documentary evidence established in accordance with ITB Clause 13 that the Bidder is eligible to bid and is qualified to perform the contract if its bid is accepted; c) Documentary evidence established in accordance with ITB Clause 14 that the goods and ancillary services to be supplied by the Bidder are eligible goods and services and conform to the bidding documents; and d) Bid security furnished in accordance with ITB Clause 15.
10. Bid Form	10.1	The Bidder shall complete the Bid Form and the appropriate Price Schedule furnished in the bidding documents, indicating the goods to be supplied, a brief description of the goods, their country of origin, Quantity, and prices.
11. Bid Prices	11.1	The Bidder shall indicate on the appropriate Price Schedule the unit prices (where applicable) and total bid price of the goods it proposes to supply under the contract.

	11.2	Prices indicated on the Price Schedule shall be delivered duty paid (DDP) prices. The price of other (incidental) services, if any, listed in the Bid Data Sheet will be entered separately.
	11.3	The Bidder's separation of price components in accordance with ITB Clause 11.2 above will be solely for the purpose of facilitating the comparison of bids by the Procuring Entity and will not in any way limit the Procuring Entity's right to contract on any of the terms offered.
	11.4	Prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation on any account, unless otherwise specified in the Bid Data Sheet. A bid submitted with an adjustable price quotation will be treated as nonresponsive and will be rejected, pursuant to ITB Clause 24. If, however, in accordance with the Bid Data Sheet, prices quoted by the Bidder shall be subject to adjustment during the performance of the contract, a bid submitted with a fixed price quotation will not be Rejected, but the price adjustment would be treated as zero.
12. Bid Currencies	12.1	Prices shall be quoted in Pak Rupees unless otherwise specified in the Bid Data Sheet.
13. Documents Establishing Bidder's Eligibility and Qualification	13.1	Pursuant to ITB Clause 9, the Bidder shall furnish, as part of its bid, documents establishing the Bidder's eligibility to bid and its qualifications to perform the contract if its bid is accepted.
	13.2	The documentary evidence of the Bidder's eligibility to bid shall establish to the Procuring Entity's satisfaction that the Bidder, at the time of submission of its bid, is from an eligible country as defined under ITB Clause 3.
	13.3	
		 a) that, in the case of a Bidder offering to supply goods under the contract which the Bidder did not manufacture or otherwise produce, the Bidder has been duly authorized by the goods' Manufacturer or producer to supply the goods in the Procuring Entity's country;
		b) that the Bidder has the financial, technical, and production capability necessary to perform the contract;
		c) that, in the case of a Bidder not doing business within the Procuring Entity's country, the Bidder is or will be (if awarded the contract) represented by an Agent in that country equipped, and able to carry out the Supplier's maintenance, repair, and

		anone north stopleting shills there are all 1 to 1 O 1's' C
		spare parts-stocking obligations prescribed in the Conditions of
		Contract and/or Technical Specifications; and that the Bidder
	1 4 1	meets the qualification criteria listed in the Bid Data Sheet.
14. Documents Establishing	14.1	Pursuant to ITB Clause 9, the Bidder shall furnish, as part of its bid,
Goods' Eligibility and Conformity to Bidding		documents establishing the eligibility and conformity to the bidding
Documents		documents of all goods and services which the Bidder proposes to
		supply under the contract.
	14.2	The documentary evidence of the eligibility of the goods and
		services shall consist of a statement in the Price Schedule of the
		country of origin of the goods and services offered which shall be
		confirmed by a certificate of origin issued at the time of shipment.
	14.3	The documentary evidence of conformity of the goods and services
		to the bidding documents may be in the form of literature, drawings,
		and data, and shall consist of:
		a) A detailed description of the essential technical and
		performance characteristics of the goods;
		b) A list giving full particulars, including available sources and
		current prices of spare parts, special tools, etc., necessary for the
		proper and continuing functioning of the goods for a period to
		be specified in the Bid Data Sheet, following commencement of
		the use of the goods by the Procuring Entity; and
		c) An item-by-item commentary on the Procuring Entity's
		Technical Specifications demonstrating substantial
		responsiveness of the goods and services to those specifications,
		or a statement of deviations and exceptions to the provisions of
		the Technical Specifications.
	14.4	For purposes of the commentary to be furnished pursuant to ITB
		Clause 14.3(c) above, the Bidder shall note that standards for
		workmanship, material, and equipment, as well as references to
		brand names or catalogue numbers designated by the Procuring
		Entity in its Technical Specifications, are intended to be descriptive
		only and not restrictive. The Bidder may substitute alternative
		standards, brand names, and/or catalogue numbers in its bid,
		provided that it demonstrates to the Procuring Entity's satisfaction
		that the substitutions ensure substantial equivalence to those
		1
15 Did Soor-it-	15 1	designated in the Technical Specifications
15. Bid Security	15.1	Pursuant to ITB Clause 9, the Bidder shall furnish, as part of its bid,
		a bid security in the amount specified in the Bid Data Sheet. [The
		bid security shall be submitted from the account of the
	15.0	firm/bidder/Bidder who submits the bid]1
	15.2	The bid security is required to protect the Procuring Entity against
		the risk of Bidder's conduct which would warrant the security's
		forfeiture, pursuant to ITB Clause 15.7.

	15.3 15.4 15.5 15.6 15.7	 The bid security shall be in Pak. Rupees and shall be in one of the following forms: The Bidder shall furnish, as part of its bid, a Bid Security/Earnest Money equivalent to of the bid price @2% in Shape of CDR from the account of bidder /firm who submits the bid in the name of "Project Director Directorate General Drug Control & Pharmacy Services". A pay order will not be acceptable. Any bid not secured in accordance with ITB Clauses 15.1 and 15.3 will be rejected by the Procuring Entity as non-responsive, pursuant to ITB Clause 24. Unsuccessful bidders' bid security will be discharged or returned as promptly as possible but not later than thirty (30) days after the expiration of the period of bid validity prescribed by the Procuring Entity pursuant to ITB Clause 16. The successful Bidder's bid security will be discharged upon the Bidder signing the contract, pursuant to ITB Clause 32, and furnishing the performance security, pursuant to ITB Clause 33. The bid security may be forfeited: a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Bid Form; or b) in the case of a successful Bidder, if the Bidder fails:
16. Period of Validity of Bids	16.1	 33. Bids shall remain valid for the period specified in the Bid Data Sheet after the date of bid opening prescribed by the Procuring Entity, pursuant to ITB Clause 19. A bid valid for a shorter period shall be rejected by the Procuring Entity as non-responsive. In exceptional circumstances, the Procuring Entity may solicit the Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. The bid security provided under ITB Clause 15 shall also be suitably
17. Format and Signing of Bid	17.1	 extended. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request will not be required nor permitted to modify its bid, except as provided in the bidding document. The Bidder shall prepare an original and the number of copies of the bid indicated in the Bid Data Sheet, clearly marking each "ORIGINAL BID" and "COPY OF BID" as appropriate. In the event of any discrepancy between them, the original shall govern.

	17. 17. 17.	 written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to bind the Bidder to the contract. All pages of the bid shall be initialed by the person or persons signing the bid. 3 Any interlineations, erasures, or overwriting shall be valid only in they are initialed by the person or persons signing the bid.
		D. Submission of Bids
18. Sealing and Marking of Bids	18.1	The Bidder shall seal the original and each copy of the bid in separate envelopes, duly marking the envelopes as "ORIGINAL" and "COPY."
		The envelopes shall then be sealed in an outer envelope.
	18.2	The inner and outer envelopes shall:
		a. Be addressed to the Procuring Entity at the address given in the Bid
		Data Sheet; and
		 b. bear the Project name indicated in the Bid Data Sheet, the Invitation for Bids (IFB) title and number indicated in the Bid Data Sheet, and a statement: "DO NOT OPEN BEFORE," to be completed with the
		time and the date specified in the Bid Data Sheet, pursuant to ITB Clause 2.2.
	18.3	The inner envelopes shall also indicate the name and address of the Bidder to enable the bid to be returned unopened in case it is declared "late".
	18.4	If the outer envelope is not sealed and marked as required by ITB Clause 18.2, the Procuring Entity will assume no responsibility for the bid's misplacement or premature opening.
19. Deadline for Submission of Bids	19.1	Bids must be received by the Procuring Entity at the address specified under ITB Clause 18.2 no later than the time and date specified in the Bid Data Sheet.
	19.2	The Procuring Entity may, at its discretion, extend this deadline for the submission of bids by amending the bidding documents in accordance with ITB Clause 7, in which case all rights and obligations of the Procuring Entity and bidders previously subject to the deadline will thereafter be subject to the deadline as extended.
20. Late Bids	20.1	Any bid received by the Procuring Entity after the deadline for submission of bids prescribed by the Procuring Entity pursuant to ITB Clause 19 will be rejected and returned unopened to the Bidder.

21. Modification and Withdrawal of Bids	21.1	The Bidder may modify or withdraw its bid after the bid's submission, provided that written notice of the modification, including substitution or withdrawal of the bids, is received by the Procuring Entity prior to the deadline prescribed for submission of bids.
	21.2	The Bidder's modification or withdrawal notice shall be prepared, sealed, marked, and dispatched in accordance with the provisions of ITB Clause 18. by a signed confirmation copy, postmarked no later than the deadline for submission of bids.
	21.3	No bid may be modified after the deadline for submission of bids.
	21.4	No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Bid Form. Withdrawal of a bid during this interval may result in the Bidder's forfeiture of its bid security, pursuant to the ITB Clause 15.7.
		E. Opening and Evaluation of Bids
22. Opening of Bids by the Procuring Entity	22.1	The Procuring Entity will open all bids in the presence of bidders' representatives who choose to attend, at the time, on the date, and at the place specified in the Bid Data Sheet. The bidders' representatives who are present shall sign a register evidencing their attendance.
	22.2	The bidders' names, bid modifications or withdrawals, bid prices, discounts, and the presence or absence of requisite bid security and such other details as the Procuring Entity, at its discretion, may consider appropriate, will be announced at the opening. No bid shall be rejected at bid opening, except for late bids, which shall be returned unopened to the Bidder pursuant to ITB Clause 20.
	22.3	Bids (and modifications sent pursuant to ITB Clause 21.2) that are not opened and read out at bid opening shall not be considered further for evaluation, irrespective of the circumstances. Withdrawn bids will be returned unopened to the bidders.
	22.4	The Procuring Entity will prepare minutes of the bid opening.
23. Clarificationof Bids	23.1	During evaluation of the bids, the Procuring Entity may, at its discretion, ask the Bidder for a clarification of its bid. The Bids request for clarification and the response shall be in writing, and no change in the prices or substance of the bid shall be sought, offered, or permitted.

24. Preliminary Examination	24.1	The Procuring Entity will examine the bids to determine whether they are complete, whether any computational errors have been made,
		whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order.
	24.2	Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected. If the Bidder does not accept the correction of the errors, its bid will be rejected, and its bid security may be forfeited. If there is a discrepancy between words and figures, the amount in words will prevail.
	24.3	The Procuring Entity may waive any minor informality, nonconformity, or irregularity in a bid which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any Bidder.
	24.4	Prior to the detailed evaluation, pursuant to ITB Clause 25 the Procuring Entity will determine the substantial responsiveness of each bid to the bidding documents. For purposes of these Clauses, a substantially responsive bid is one which conforms to all the terms and conditions of the bidding documents without material deviations. Deviations from, or objections or reservations to critical provisions, such as those concerning Bid Security (ITB Clause 15), Applicable Law (GCC Clause 30), and Taxes and Duties (GCC Clause 32), will be deemed to be a material deviation. The Procuring Entity's determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.
	24.5	If a bid is not substantially responsive, it will be rejected by the Procuring Entity and may not subsequently be made responsive by the Bidder by correction of the nonconformity.
25. Evaluation and Comparison of Bids Alternative	25.1	The Procuring Entity will evaluate and compare the bids which have been determined to be substantially responsive, pursuant to ITB Clause 24.
	25.2	The Procuring Entity's evaluation of a bid will be on delivered duty paid (DDP) price inclusive of prevailing duties and will exclude any allowance for price adjustment during the period of execution of the contract, if provided in the bid.
	25.3	The Procuring Entity's evaluation of a bid will take into account, in addition to the bid price quoted in accordance with ITB Clause 11.2, one or more of the following factors as specified in the Bid Data Sheet, and quantified in ITB Clause 25.4:

	a. incidental costs
	b. delivery schedule offered in the bid;
	c. deviations in payment schedule from that specified in the Special
	Conditions of Contract;
	d. the cost of components, mandatory spare parts, and service;
	e. the availability of spare parts and after-sales services for the
	equipment offered in the bid for Procuring Entity;
	f. the projected operating and maintenance costs during the life of
	the equipment; the performance and productivity of the
	equipment offered; and/or
	g. other specific criteria indicated in the Bid Data Sheet and/or in
	the Technical Specifications.
25.4	For factors retained in the Bid Data Sheet pursuant to ITB 25.3, one
	or more of the following quantification methods will be applied, as
	detailed in the Bid Data Sheet:
	2. In sidental assta marridad ha tha hiddar will be added ha Drasaria a
	a. Incidental costs provided by the bidder will be added by Procuring Entity to the delivered duty paid (DDP) price at the destination.
	b. Delivery schedule.
	The Procuring Entity requires that the goods under the Invitation
	for Bids shall be delivered at the time specified in the Schedule
	of Requirements which will be treated as the base, a delivery
	"adjustment" will be calculated for bids by applying a
	percentage, specified in the Bid Data Sheet, of the DDP price for
	each week of delay beyond the base, and this will be added to
	the bid price for evaluation. No credit shall be given to early
	delivery.
	or
	ii. The goods covered under this invitation are required to be
	delivered (shipped) within an acceptable range of weeks
	specified in the Schedule of Requirement. No credit will be
	given to earlier deliveries, and bids offering delivery beyond this
	range will be treated as non-responsive. Within this acceptable
	range, an adjustment per week, as specified in the Bid Data
	Sheet, will be added for evaluation to the bid price of bids
	offering deliveries later than the earliest delivery period
	specified in the Schedule of Requirements.
	or
	iii. The goods covered under this invitation are required to be
	delivered in partial shipments, as specified in the Schedule of
	Requirements. Bids offering deliveries earlier or later than the
	specified deliveries will be adjusted in the evaluation by adding
	to the bid price a factor equal to a percentage, specified in the
	Bid Data Sheet, of DDP price per week of variation from the

	1
specified delivery schedule.	
c. Deviation in payment schedule:	
i. Bidders shall state their bid price for outlined in the SCC. Bids will be en- this base price. Bidders are, however alternative payment schedule and in bid price they wish to offer for su schedule. The Procuring Entity alternative payment schedule of Bidder.	valuated on the basis of er, permitted to state an indicate the reduction in ch alternative payment y may consider the
or ii. The SCC stipulates the payment s Procuring Entity. If a bid deviates f such deviation is considered accep Entity, the bid will be evaluated earned for any earlier payments outlined in the bid as compared with invitation, at the rate per annum spe Data Sheet.	rom the schedule and if ptable to the Procuring by calculating interest involved in the terms those stipulated in this
d. Cost of spare parts.	
i. The list of items and quantities components, and selected spare parts during the initial period of operation s Sheet, is annexed to the Technical S cost of these items, at the unit prices of be added to the bid price.	s, likely to be required pecified in the Bid Data pecifications. The total
or ii. The Procuring Entity will draw up a high-value items of components and estimated quantities of usage in the int specified in the Bid Data Sheet. The t and quantities will be computed from submitted by the Bidder and added to	spare parts, along with itial period of operation otal cost of these items spare parts unit prices
or iii. The Procuring Entity will estimate to usage in the initial period of operation Data Sheet, based on information fur as well as on past experience of the Pro- procuring agencies in similar situation added to the bid price for evaluation.	on specified in the Bid nished by each Bidder, rocuring Entity or other

 e. Spare parts and after sales service facilities in the Procuring Entity's country. The cost to the Procuring Entity of establishing the minimum service facilities and parts inventories, as outlined in the Bid Data Sheet or elsewhere in the bidding documents, if quoted separately, shall be added to the bid price. f. Operating and maintenance costs. Since the operating and maintenance costs of the goods under procurement form a major part of the life cycle cost of the equipment, these costs will be evaluated in accordance with the criteria specified in the Bid Data Sheet or in the Technical
 service facilities and parts inventories, as outlined in the Bid Data Sheet or elsewhere in the bidding documents, if quoted separately, shall be added to the bid price. f. Operating and maintenance costs. Since the operating and maintenance costs of the goods under procurement form a major part of the life cycle cost of the equipment, these costs will be evaluated in accordance with the criteria specified in the Bid Data Sheet or in the Technical
Since the operating and maintenance costs of the goods under procurement form a major part of the life cycle cost of the equipment, these costs will be evaluated in accordance with the criteria specified in the Bid Data Sheet or in the Technical
procurement form a major part of the life cycle cost of the equipment, these costs will be evaluated in accordance with the criteria specified in the Bid Data Sheet or in the Technical
Specifications.
g. Performance and productivity of the equipment.
 i. Bidders shall state the guaranteed performance or efficiency in response to the Technical Specification. For each drop in the performance or efficiency below the norm of 100, an adjustment for an amount specified in the Bid Data Sheet will be added to the bid price, representing the capitalized cost of additional operating costs over the life of the plant, using the methodology specified in the Bid Data Sheet or in the Technical Specifications. or ii. Goods offered shall have a minimum productivity specified under the relevant provision in the Technical Specifications to be considered responsive. Evaluation shall be based on the cost per unit of the actual productivity of goods offered in the bid, and adjustment will be added to the bid price using the methodology specified in the Bid Data Sheet or
in the Technical Specifications.
h. Specific additional criteria indicated in the Bid Data Sheet and/or in the Technical Specifications.
25.5 Merit Point System: The following merit point system for weighing evaluation factors can
be applied if none of the evaluation methods listed in 25.4 above has been retained in the Bid Data Sheet. The number of points allocated
to each factor shall be specified in the Bid Data Sheet
[In the Bid Data Sheet, choose from the range of]
Evaluated price of the goods60 to 90
Cost of common list spare parts 0 to 20

		Technical features, and maintenance and operating costs	0 to 20
		Availability of service and spare parts	0 to 20
		Standardization	0 to 20
		Total	100
		The bid scoring the highest number of po Highest-Ranking fair bid.	ints will be deemed to be the
26. Contacting the Procuring Entity	26.1	Subject to ITB Clause 23, no Bidder shall on any matter relating to its bid, from th the time the contract is awarded. If t additional information to the notice of th do so in writing.	e time of the bid opening to he Bidder wishes to bring
	26.2	Any effort by a Bidder to influence decisions on bid evaluation, bid compar- result in the rejection of the Bidder's bid.	ison, or contract award may
		F. Award of Contrac	t
27. post- qualification	27.1	In the absence of prequalification, the Prodetermine to its satisfaction whether the Phaving submitted the Highest-ranking fair bid is contract satisfactorily, in accordance with Clause 13.3.	Bidder that is selected as qualified to perform the
	27.2	The determination will take into account technical, and production capabilities. It examination of the documentary evidence qualifications submitted by the Bidder, pr as well as such other information as the F necessary and appropriate.	will be based upon an e of the Bidder's ursuant to ITB Clause 13.3,
	27.3	An affirmative determination will be a procent to the Bidder. A negative determine rejection of the Bidder's bid, in which even will proceed to the next highest ranking for Determination of that Bidder's capabilities.	ination will result in ent the Procuring Entity fair bid to make a similar
28. Award Criteria	28.1	Subject to ITB Clause 30, the Procuring E to the successful Bidder whose bid h substantially responsive and has been de ranking fair bid as defined in Section-2(1 provided further that the Bidder is determ perform the contract satisfactorily.	has been determined to be etermined to be the Highest- (c)(i) of KPPRA Act 2012,

	-	
29. Procuring Entity's Right to Vary Quantities at Time of Award	29.1	The Procuring Entity reserves the right at the time of contract award to increase or decrease, by the percentage indicated in the Bid Data Sheet, the quantity of goods and services originally specified in the Schedule of Requirements without any change in unit price or other terms and conditions.
30. Procuring Entity's Right to Accept any Bid and to Reject any or All Bids	30.1	The Procuring Entity reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to the affected Bidder or bidders or any obligation to inform the affected Bidder or bidders of the grounds for the Procuring Entity's action.
31. Notification of Award	31.1	Prior to the expiration of the period of bid validity, the Procuring Entity will notify the successful Bidder in writing by registered letter or by cable, to be confirmed in writing by registered letter, that its bid has been accepted.
	31.2	The notification of award will constitute the formation of the Contract.
	31.3	Upon the successful Bidder's furnishing of the performance security pursuant to ITB Clause 33, the Procuring Entity will promptly notify each unsuccessful Bidder and will discharge its bid security, pursuant to ITB Clause 15.
32. Signing of Contract	32.1	At the same time as the Procuring Entity notifies the successful Bidder that its bid has been accepted, the Procuring Entity will send the Bidder the Contract Form provided in the bidding documents, incorporating all agreements between the parties.
	32.2	Within thirty (10) days of receipt of the Contract Form, the successful Bidder shall sign and date the contract and return it to the Procuring Entity.
33 Performance Security	33.1	Within twenty (15) days of the receipt of notification of award from the Procuring Entity, the successful Bidder shall furnish the performance security in accordance with the Conditions of Contract, in the Performance Security Form provided in the bidding documents, or in another form acceptable to the Procuring Entity.
	33.2	Failure of the successful Bidder to comply with the requirement of ITB Clause 32 or ITB Clause 33.1 shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security, in which event the Procuring Entity may make the award to the next Highest ranking fair Bid or call for new bids.

34. Corrupt or Fraudulent Practices	34.1	 The Government of Khyber Pakhtunkhwa requires that Procuring Entity's (including beneficiaries of donor agencies' loans), as well as Bidders/Suppliers/Bidders under Government-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the KPPRA, in accordance with the Khyber Pakhtunkhwa Public Procurement Act, 2012 and Rules made thereunder: a. defines, for the purposes of this provision, the terms set forth below as follows: i. "Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and ii. "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Procuring Entity, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Procuring Entity of the benefits of free and open competition; b. will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;
		c. will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a Government-financed contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a Government-financed contract.
	34.2	Furthermore, Bidders shall be aware of the provision stated in sub- clause 5.4 and sub-clause 24.1 of the General Conditions of Contract.
35. Integrity Pact	35.1	The Bidder shall sign and stamp the Integrity Pact provided at Form - 7 to Bid in the Bidding Document for all Provincial Government procurement contracts exceeding Rupees ten million. Failure to such Integrity Pact shall make the bidder non-responsive.

Part One - Section II (General Conditions of Contract)

Notes on the General Conditions of Contract

The General Conditions of Contract in Part One Section II, read in conjunction with the Special Conditions of Contract in Part Two Section-III and other documents listed therein, should be a complete document expressing all the rights and obligations of the parties.

The General Conditions of Contract herein shall not be altered. Any changes and complementary information, which may be needed, shall be introduced only through the Special Conditions of Contract in Part Two Section III.

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GENERAL CONDITIONS OF CONTRACT

1. Definitions	1.1	In this Contract, the following terms shall be interpreted as indicated:
		a. "The Contract" means the agreement entered into between the Procuring Entity and the Supplier, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
		b. "The Contract Price" means the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations.
		c. "The Goods" means all of the equipment, machinery, and/orother materials which the Supplier is required to supply to the Procuring Entity under the Contract.
		d. "The Services" means those services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training, and other such obligations of the Supplier covered under the Contract.
		e. "GCC" means the General Conditions of Contract contained in this section.
		f. "SCC" means the Special Conditions of Contract.
		g. "The Procuring Entity" means the organization purchasing the Goods, as named in SCC.
		h. "TheProcuringEntity'scountry" is the country named in SCC.
		i. "The Supplier" means the individual or firm supplying the Goods and Services under this Contract.
		j. "The Project Site," where applicable, means the place or places named in SCC.
		k. "Day" means calendar day.
2. Application	2.1	These General Conditions shall apply to the extent that they are not superseded by provisions of other parts of the Contract.
3. Country of Origin	3.1	All Goods and Services supplied under the Contract shall have their origin in the countries and territories eligible under the rules and `further elaborated in the SCC.

	3.2	For purposes of this Clause, "origin" means the place where
		the Goods were mined, grown, or produced, or from which the Services are supplied. Goods are produced when, through manufacturing, processing, or substantial and major assembly of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
	3.3	The origin of Goods and Services is distinct from the nationality of the Supplier.
4. Standards	4.1	The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standards appropriate to the Goods' country of origin. Such standards shall be the latest issued by the concerned institution.
5. Use of Contract Documents and Information; Inspection and Audit by the Government	5.1	The Supplier shall not, without the Procuring Entity's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the Procuring Entity in connection therewith, to any person other than a person employed by the Supplier in the performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
	5.2	The Supplier shall not, without the Procuring Entity's prior written consent, make use of any document or information enumerated in GCC Clause 5.1 except for purposes of performing the Contract.
	5.3	Any document, other than the Contract itself, enumerated in GCC Clause 5.1 shall remain the property of the Procuring Entity and shall be returned (all copies) to the Procuring Entity on completion of the Supplier's performance under the Contract if so, required by the Procuring Entity.
	5.4	The Supplier shall permit the Procuring Entity to inspect the Supplier's accounts and records relating to the performance of the Supplier and to have them audited by auditors appointed by the procuring Entity, if so required.
6. Patent Rights	6.1	The Supplier shall indemnify the Procuring Entity against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof in the Procuring Entity's country.

7. Performance Security	7.1	Within twenty (20) days of receipt of the notification of Contract award, the successful Bidder shall furnish to the Procuring Entity the performance security in the amount specified in SCC.
	7.2	The proceeds of the performance security shall be payable to the Procuring Entity as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.
	7.3	The performance security shall be denominated in the currency of the Contract acceptable to the Procuring Entity and shall be in one of the following forms:
		a. a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the Procuring Entity's country, in the form provided in the bidding documents or another form acceptable to the Procuring Entity; or
		b. a cashier's or certified check.
	7.4	The performance security will be discharged by the Procuring Entity and returned to the Supplier not later than thirty (30) days following the date of completion of the Supplier's performance obligations under the Contract, including any warranty obligations, unless specified otherwise in SCC.
8. Inspections and Tests	8.1	The Procuring Entity or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications at no extra cost to the Procuring Entity. SCC and the Technical Specifications specifies inspections and tests the Procuring Entity requires and where they are to be conducted. The Procuring Entity shall notify the Supplier in writing, in a timely manner, of the identity of any representatives retained for these purposes.
	8.2	The inspections and tests may be conducted on the premises of the Supplier or, at point of delivery, and/or at the Goods' final destination. If conducted on the premises of the Supplier, all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Procuring Entity.
	8.3	Should any inspected or tested Goods fail to conform to the Specifications, the Procuring Entity may reject the Goods, and the Supplier shall either replace the rejected Goods or make alterations necessary to meet specification requirements free of cost to the Procuring Entity.

	8.4	The Procuring Entity's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival in the Procuring Entity's country shall in no way be limited or waived by reason of the Goods having previously been inspected, tested, and passed by the Procuring Entity or its representative prior to the goods' shipment from the country of origin.
	8.5	Nothing in GCC Clause 8 shall in any way release the Supplier from any warranty or other obligations under this Contract.
9. Packing	9.1	The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.
	9.2	The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified in SCC, and in any subsequent instructions ordered by the Procuring Entity.
10. Delivery and Documents	10.1	Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in the Schedule of Requirements. The details of shipping and/or other documents to be furnished by the Supplier are specified in SCC.
	10.2	Documents to be submitted by the Supplier are specified in SCC.
11. Insurance	11.1	The Goods supplied under the Contract shall be delivered duty paid (DDP) under which risk is transferred to the buyer after having been delivered, hence insurance coverage is sellers' responsibility.
12. Transportation	12.1	The Supplier is required under the Contact to transport the Goods to a specified place of destination within the Procuring Entity's country, transport to such place of destination in the Procuring Entity's country, including insurance and storage, as shall be specified in the Contract, shall be arranged by the Supplier, and related costs shall be included in the ContractPrice.

13. Incidental Services	13.1	 The Supplier may be required to provide any or all of the following services, including additional services, if any, specified in SCC: a performance or supervision of on-site assembly and/or start-up of the supplied Goods; b furnishing of tools required for assembly and / or maintenance of the supplied Goods; c furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods; d. performance or supervision or maintenance and/or repair of the
		 supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and e. training of the Procuring Entity's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.
	13.2	Prices charged by the Supplier for incidental services, if not included in the ContractPricefortheGoods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged for other parties by the Supplier for similar services.
14. Spare Parts	14.1	 As specified in SCC, the Supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier: a. such spare parts as the Procuring Entity may elect to purchase from the Supplier, provided that this election shall not relieve the Supplier of any warranty obligations under the Contract; and b. in the event of termination of production of the spare parts: h. advance notification to the Procuring Entity of the pending termination, in sufficient time to permit the Procuring Entity to procure needed requirements; i. following such termination, furnishing at no cost to the Procuring Entity, the blueprints, drawings, and specifications of the spare parts, if requested.

15. Warranty	15.1	The Supplier warrants that the Goods supplied under the Contract are new, unused, of the most recent or current models, and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The Supplier further warrants that all Goods supplied under this Contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the Procuring Entity's specifications) or from any act or omission of the Supplier, that may develop under normal use of the supplied Goods in the conditions prevailing in the country of final destination.
	15.2	This warranty shall remain valid for such months and years as specified in Special Conditions of Contract months after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the Contract.
	15.3	The Procuring Entity shall promptly notify the Supplier in writing of any claims arising under this warranty.
	15.4	Uponreceipt of such notice, the Supplier shall, within the period specified in SCC and with all reasonable speed, repair or replace the defective Goods or parts thereof, without costs to the Procuring Entity.
	15.5	If the Supplier, having been notified, fails to remedy the defect(s) within the period specified in SCC, within a reasonable period, the Procuring Entity may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Procuring Entity may have against the Supplier under the Contract.
16. Payment	16.1	The method and conditions of payment to be made to the Supplier under this Contract shall be specified in SCC.
	16.2	The Supplier's request(s) for payment shall be made to the Procuring Entity in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and Services performed, and by documents submitted pursuant to GCC Clause 10, and upon fulfillment of other obligations stipulated in the Contract.
	16.3	Payments shall be made promptly by the Procuring Entity, but in no case later than sixty (60) days after submission of an invoice or claim by the Supplier.
	16.4	The currency of payment is Pak. Rupees.

17. Prices	17.1	Prices charged by the Supplier for Goods delivered and Services performed under the Contract shall not vary from the prices quoted by the Supplier in its bid, with the exception of any price adjustments authorized in SCC or in the Procuring Entity's request for bid validity extension, as the case may be.
18. Change Orders	18.1	 The Procuring Entity may at any time, by a written order given to the Supplier pursuant to GCC Clause 31, make changes within the general scope of the Contractin any one or more of the following: a. drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Procuring Entity;
		 b. the method of shipment or packing; c. the place of delivery; and/or d. the Services to be provided by the Supplier.
	18.2	If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or delivery schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this clause must be asserted within thirty (30) days from the date of the Supplier's receipt of the Procuring Entity's change order.
19. Contract Amendments	19.1	Subject to GCC Clause 18, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.
20. Assignment	20.1	The Supplier shall not assign, in whole or in part, its obligations to perform under this Contract, except with the Procuring Entity's prior written consent.
21. Subcontracts	21.1	The Supplier shall notify the Procuring Entity in writing of all subcontracts awarded under this Contract if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the Supplier from any liability or obligation under the Contract.
	21.2	Subcontracts must comply with the provisions of GCC Clause 3.
22. Delays in the Supplier's Performance	22.1	Delivery of the Goods and performance of Services shall be made by the Supplier in accordance with the time schedule prescribed by the Procuring Entity in the Schedule of Requirements.

	22.2	If at any time during performance of the Contract, the Supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the Goods and performance of Services, the Supplier shall promptly notify the Procuring Entity in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the Procuring Entity shall evaluate the situation and may at its discretion extend the Supplier's time for performance, with or without liquidated damages, in which case the extension shall be ratified by the parties by amendment of Contract.
	22.3	Except as provided under GCC Clause 25, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to GCC Clause 23, unless an extension of time is agreed upon pursuant to GCC Clause 22.2 without the application of liquidated damages.
23. Liquidated Damages	23.1	SubjecttoGCCClause 25, if the Supplier fails to deliver any or all of the Goods or to perform the Services within the period(s) specified in the Contract, the Procuring Entity shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in SCC of the delivered price of the delayed Goods or unperformedServicesforeachweekorpartthereofof delay until actual delivery or performance, up to a maximum deduction of the percentage specified in SCC. Once the maximum is reached, the Procuring Entity may consider termination of the Contract pursuant to GCC Clause 24.

24. Termination for Default	24.1	 The Procuring Entity, without prejudice to any other remedy for breachofContract, by writtennotice of default sent to the Supplier, may terminate this Contract in whole or in part: a. if the Supplier fails to deliver any or all of the Goods within the period(s)specified in the Contract, or within any extension thereof granted by the Procuring Entity pursuant to GCC Clause 22;or b. if the Supplier fails to perform any other obligation(s) under the Contract. c. if the Supplier, in the judgment of the Procuring Entity has engaged in corrupt or fraudulent practices in competing for or in executing the Contract. For the purpose of this clause: "Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution. "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition.
	24.2	In the event the Procuring Entity terminates the Contract in whole or in part, pursuant to GCC Clause 24.1, the Procuring Entity may procure, upon such terms and in such manner as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the Procuring Entity for any excess costs for such similar Goods or Services. However, the Supplier shall continue performance of the Contract to the extent not terminated.
25. Force Majeure	25.1	Notwithstanding the provisions of GCC Clauses 22, 23, and 24, the Supplier shall not be liable for forfeiture of its performance security, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

	25.2	Forpurposes of this clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not restricted to, acts of the Procuring Entity in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.
	25.3	If a Force Majeure situation arises, the Supplier shall promptly notify the Procuring Entity in writing of such condition and the cause thereof. Unless otherwise directed by the Procuring Entity in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
26. Termination for Insolvency	26.1	The Procuring Entity may at any time terminate the Contract by giving written notice to the Supplier if the Supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Procuring Entity.
27. Termination for Convenience	27.1	The Procuring Entity, by written notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Procuring Entity's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.
	27.2	 The Goods that are complete and ready for shipment within thirty (30) days after the Supplier's receipt of notice of termination shall be accepted by the Procuring Entity at the Contract terms and prices. For the remaining Goods, the Procuring Entity may elect: a. to have any portion completed and delivered at the Contract terms and prices; and/or b. to cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and Services and for materials and parts previously procured by the supplier

28. Resolution of Disputes	28.1	The Procuring Entity and the Supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.
	28.2	If, after thirty (30) days from the commencement of such informal negotiations, the Procuring Entity and the Supplier have been unable to resolve amicably a Contract dispute, either party may require that the dispute be referred for resolution to the formal mechanisms specified in SCC. These mechanisms may include, but are not restricted to, conciliation mediated by a third party, adjudication in an agreed manner and/orarbitration.
29. Governing Language	29.1	The Contract shall be written in the language specified in SCC. Subject to GCC Clause 30, the version of the Contract written in the specified language shall govern its interpretation. All correspondence and other documents pertaining to the Contract which are exchanged by the parties shall be written in the same language.
30. Applicable Law	30.1	The Contract shall be interpreted in accordance with the laws of the Procuring Entity's country, unless otherwise specified in SCC.
31. Notices	31.1	Any notice given by one party to the other pursuant to this Contract shall be sent to the other party in writing or by cable, telex, or facsimile and confirmed in writing to the other party's address specified in SCC.
	31.2	A notice shall be effective when delivered or on the notice's effective date, whichever is later.
32. Taxes and Duties	32.1	Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods to the ProcuringEntity.

PART TWO (PROCUREMENT SPECIFIC PROVISIONS)

- Invitation for Bids (IFB)
- Bid Data Sheet (BDS)
- Special Conditions of Contract(SCC)
- Schedule of Requirements
- Technical Specifications
- Qualification and Evaluation Criteria
- Sample Forms
- Eligibility

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PART TWO SECTION I. INVITATION FOR BID (IFB)

INVITATION FOR BID

OFFICE OF THE PROJECT DIRECTOR,

DIRECTORATE GENERAL DRUGS CONTROL & PHARMACY SERVICES KHYBER PAKHTUNKHWA, PESHAWAR FOR PROCUREMENT OF EQUIPMENT / INSTRUMENTS / GLASSWARES / INFORMATION, COMMUNICATION & TECHNOLOGY (ICT) EQUIPMENT AND OTHERS FOR ESTABLISHMENT OF PROVINCIAL FOOD AND DRUG TESTING LABORATORIES PESHAWAR

Directorate General Drug Control & Pharmacy Services (DG, DC & PS), Khyber Pakhtunkhwa Peshawar / Project Director invites sealed bids under National Competitive Bidding from Manufacturers and/ or Importers and/ or authorized agents for Equipment / Instruments / Glassware / Information, Communication & Technology (ICT) Equipment and Others for FY 2024-25 for the project titled "Establishment of Provincial Food & Drug Testing Laboratories".

Bidding shall be conducted through **Single Stage–Two Envelopes Bidding Procedure** comprising a single package containing two envelopes as per **KPPRA Rules-2014**. Each envelope shall contain Technical and Financial Bid separately clearly marked in bold & legible letters. The firms are expected to provide complete information of the bid along with its postal as well as valid email address and phone number/s on each respective envelope.

Interested Manufacturers and/ or Importers and/ or authorized agents must obtain Application Form along with complete set of bidding documents from the office of the Director General Drugs Control & Pharmacy Services, Block-B, Old FATA Secretariat Warsak Road Peshawar during office hours on any working day till **Wednesday 04th September 2024, Bids shall be submitted on 05th September 2024 till 11:00 am sharp and shall be opened at 11:30 am on the same day, against the non-refundable cash payment of Pak Rupees Two thousand per application form. The Bidding Documents may be downloaded from the following official websites: <u>www.healthkp.gov.pk</u>, <u>www.kpfsa.gov.pk</u> and <u>www.kppra.gov.pk</u>.**

The bidders are required to submit their inputs/reservations on Bidding Documents including Specifications, Criteria etc. to the Project Director / DG, DC & PS office in writing on or before 7th August 2024, a pre-bid meeting with the interested bidders will be held on, 8th August 2024 at 11:00am at office of the Project Director, Block-B, Old FATA Secretariat, Warsak Road Peshawar.

Interested Bidders must submit sealed bids to the office of the Project Director / DG, DC & PS on or before <u>11:00 AM sharp, Thursday 05th September 2024 and will be opened on the same day at 11:30</u> <u>AM</u> in the presence of those bidders or their representatives, who choose to attend the process. Bid submitted after 11:00 AM shall not be entertained.

Financial bid must be accompanied with Bid Security of 2% of the bid value in the name of the Project Director / Director General Drug Control & Pharmacy Services Khyber Pakhtunkhwa Peshawar, which shall be from bank account of the prospective bidder. Ordinary cheque and Payment Order (PO) in the form of bid security shall result in disqualification of bidder as per KPPRA Act 2012 and Rules 2014. Technical bids must be accompanied with a photocopy of the bid security (not showing the amount) and an Affidavit on Judicial Stamp paper to the effect that bid security as per Bid data Sheet is attached in the financial bid, failing which the technical bid will be considered as non-responsive.

Bids must be computer typed & printed and the offered bid prices must be written both in words & figures. Bid prices/ quotations with cutting and over-writing shall not be accepted to the extent of that particular quoted item. An authorized person of the bidder/firm shall sign & stamp all pages of the bid

having page numbers on all pages. Firms shall submit bids in hard/Tape binding, and bids submitted in box file/ loose file will be considered non-responsive.

The technical proposal shall contain all the details in accordance with standard specification of the items/goods mentioned in the Schedule of Requirements (SOR) which must be supported by catalogue/Brochures issued by original manufacturer. Bids will be submitted on the format mentioned in BSDs under returnable bidding forms. All bidders are also required to submit the quoted products list with the specifications in soft copies on a readable Computer USB in soft form (Editable *MS Word or Excel*) and, duly labeled by a permanent marker with the name of bidder/ firm. Bidders are required to offer the most competitive prices of their items.

The undersigned reserves the right to reject any or all the bids as per provisions contained in Rule 47 of KPPRA Rules 2014.

Project Director, Establishment of Food and Drug Testing Laboratories Director General Drug Control & Pharmacy Services, Khyber Pakhtunkhwa, Block-B, Old FATA Secretariat Warsak Road Peshawar **Tel No: 091-9222824. Email:** directorgeneraldrugs@healthkp.gov.pk

SECTION II. BID DATA SHEET

BID DATA SHEET

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

Ref No	Introduction	Description
ITB 1.1	Name of Procuring Entity	Project Director / Directorate General Drug Control &
	of Government of	Pharmacy Services Khyber Pakhtunkhwa Peshawar.
	Khyber Pakhtunkhwa:	
ITB 1.1	LoanorcreditorProject	ADP No. 1159/210282
	allocation Number:	"Establishment of Provincial Food & Drug Testing
	Loan or credit or Project	Laboratory Khyber Pakhtunkhwa"
	Allocation amount:	
ITB 1.1	Name of Project:	Establishment of Provincial Food & Drug Testing
		Laboratories.
ITB 4.1	Name of Contract:	Procurement Of Equipment / Instruments / Glassware /
		Information, Communication & Technology (ICT) Equipment
		and Others for Establishment of Provincial Food & Drugs
		Testing Laboratories Peshawar.
ITB 6.1	Procuring Entity's	Project Director / Director General Drug Control & Pharmacy
	Address, telephone,	Services Khyber Pakhtunkhwa Peshawar
	Telex, and facsimile,	Tel No: 091- 9222824
	numbers:	Email: directorgeneraldrugs@healthkp.gov.pk
ITB 8.1	Language of the bid.	Language of the bid is English.
Bid Price and	l Currency	
ITB 11.2	Currency	The price quoted shall be in Pakistani Rupees (Rs)
IT 11.5 B	Quoted Price	The quoted Price will be fixed
Preparation a	and Submission of Bids	
ITB 13.2	Documentary evidence of	That, in the case of a Bidder offering to supply Goods under
	the Bidder's qualifications	the Contract that the Bidder manufactures or otherwise
	to perform the Contract if	produces (using components supplied by primary
	its Bid is accepted:	manufacturers) that the Bidder:
		a. is incorporated in the country of manufacturing of the
		Goods
		b. has been licensed by the regulatory authority in the
		country of manufacture to supply the Goods.
		c. has manufactured or marketed the specific goods covered by this bidding document or similarGoods for at least two (2) years.

That, in the case of a Bidder offering to supply Goods under the Contract and does not manufacture or otherwise produce the goods offered,
 d) The bidder must be duly authorized by a Manufacturer of the Goods that meets the criteria under (a), to supply the Goods in Pakistan. The Bidder shall also submit the following additional information: Signed & Stamped copies of its audited financial statements for the past three fiscal years. Valid, Signed & Stamped NTN and STRN certificates. Affidavit on legal stamp paper

ITB 13.3 (d)	Qualification	a. Manufacturer / Importer / Sole Agent of Manufacturer for
	requirements:	(Category-A and B)
		b. Manufacturer / Importer / Authorized Agent for
		(Category-C).
		c. Bidder's Certificate of Incorporation in Procuring
		Entity's country.
		d. Manufacturer's Authorization(s) (Such authorization letter
		shall be furnished in accordance to the sample format of bid
		solicitation document).
		e. The bidder(s) must provide copy of Bidder's
		Certificate of Incorporation/ registration signed and
		stamped.
		f. The bidder(s) shall provide National Tax No. and Sales
		Tax No. The bidder should be on Active Taxpayers
		List (ATL) on FBR.
		g. Bidder(s) must provide an Affidavit on judicial stamp paper of B_{0} 100/ or more that the bidder is not
		paper, of Rs. 100/- or more, that the bidder is not blacklisted by any Public Sector Organization.
		h. The bidder should have an average annual turnover in
		the last three years equal to or more 50 million PKR.
		Alternately, the bidder should have successfully
		completed in the last three years any specific project
		having value equal to or higher than 50 million PKR.
		i. Two years supported warranty after sales & services,
		free of cost (with spare parts).
		j. Bid Validity period of 180-days.
		k. Submission of required amount of earnest money. A
		confirmation to this extent shall be provided in
		Technical Bid (without showing the amount).
		Bidder(s) shall furnish, as part of its bid (along with Bid
		Forms & Price Schedule) the following documentary
		evidence to proof Bidder's qualifications to perform the
		Contract and all evidence submitted must be signed &
		stamped by the bidder.

ITB 13.3 (e)	Spare parts required for period of years of Operation:	 a. Three Years free of cost provision of services and spare parts under warranty period. b. Two Years free of cost service without spare parts. c. Ten Years parts availability in market and will provide certificate for the same. Separate list of spare parts must be submitted for each equipment. The list must be individually itemized and submitted with the technical bid. The spare parts must also be individually costed, and cost of each spare partmust be separately submitted with financial bid. The cost of spare parts must not be added to the price of equipment. This requirement does not obligate Procuring Entity to Purchase the spare parts
ITB 15.1	Amount of bid security:	The Bidder shall furnish, as part of its bid, a Bid Security/Earnest Money equivalent to 2% of the bid price in Shape of CDR from the account of bidder /firm who submits the bid.
ITB 16.1	Bid validity period:	180 Days from the date of Technical Bid Opening.
ITB 17.1	Number of copies:	One Copy Hard format + USB as mentioned in the IFB
ITB 18.2 (a)	Address for bid submission:	Project Director / Director General Drug Control & Pharmacy Services Khyber Pakhtunkhwa Peshawar
ITB 18.2 (b)	IFB Title:	IFB Title: Procurement of Equipment / Instruments / Glassware / Information, Communication & Technology (ICT) Equipment and Others for Establishment Of Provincial Food And Drugs Testing Laboratories Peshawar.
ITB 19.1	Deadline for bid submission:	Date: <u>Thursday 05th September 2024.</u> Time: 11:00 AM Sharp
	Pre-Bid meeting with the bidders:	The bidders are required to submit their inputs/reservations on Bidding Documents including Specifications, Criteria etc. to the Project Director/DG, DC & PS office in writing on or before 7 th August 2024, a prebid meeting with the interested bidders will be held on 8 th August 2024.

ITB 22.1	Time, Date, and Place for Bid Opening:	 Name: Directorate General Drug Control & Pharmacy Services / Project Director Building: Block-B, Old FATA Secretariat Warsak Road Peshawar Bid Opening Date: Thursday 5th September 2024. Bid Opening Time: 11:30 PM
Bid Evaluatio		
ITB 23.1	Clarification of Bids:	The Procuring Entity may ask the Bidder in writing, only for clarification regarding the received documents in the bid. However, no change in the prices or substance of the bid shall be sought, offered, permitted, or entertained. This communication shall be with the prior approval of Chairperson Procurement / Executive Committee.
ITB 25.3	Evaluation and	Merit Point Evaluation
	Comparison of Bids:	The items ranked highest in merit points (obtained through and based on technical and financial evaluation) will get unit rate central Contract.
		a. Technical Specifications
		b. Performance Specifications
		c. Evaluation Criteria
		d. Financial Proposal
ITB 25.4(a) ITB 25.4(b)	One option only Delivery schedule. Relevant parameters in accordance with Optionselected.	Not Applicable
Option I	Adjustment expressed as a	Not Applicable
Option II Option III	Percentage, or adjustment expressed in an amount in the currency of bid evaluation.	
ITB 25.4 (c)	Deviation in payment	Not Applicable
(ii)	schedule: Annual interestrate:	
ITB 25.4 (d)	Cost of spare parts:	Not Applicable
ITB 25.4 (e)	Spare parts and after sales service facilities in the Procuring agency's	As per Section IV - Technical evaluation criteria
	Country.	
ITB 25.4 (f)	Operating and maintenance costs:	Not Applicable

ITB 25.4 (g)	Performance and	Not Applicable
(g)	Productivity of	
	Equipment:	
ITB 25.4 (h)	Details on the evaluation	Evaluation of Bids will be based on following factors:
11 D 23.4 (II)	method or reference to the	a. Technical Specifications
	Technical	
		b. Performance Specifications
	Specifications:	c. Sample Evaluation
		d. Delivery Period
		e. Warranty Provisions
		f. After Sale Service (Availability of after sale service
		Facilities in KhyberPakhtunkhwa)
ITB 28.1	Award Criteria	As per Section 2 (1)(c)(i) of KPPRA Act 2012 The highest-
		ranking fair bid in accordance with the evaluation criteria setforth
		hereinthesebidsolicitationdocuments. Highest Ranking fair
		bid is the bid i.e. Substantively responsive and Ranks 1st
		based on achieving highest combined Technical &
		Financial Evaluations Scores.
ITB 29.1	Percentage for	The Procuring Entity reserves the right at the time of contract
	quantity increase or	award to increase or decrease, the quantity of goods and
	decrease	services originally specified in the Schedule of Requirements
		without any change in unit price or other
		Terms and conditions.
ITB 33.1	Doufonmoneo Soon-it-	10% of the total price of award of contractor as desired by the
115 33.1	Performance Security	
		ProcuringEntityatthetimeofcontractconsidering the 2%
		Earnest money already submitted as CDR.

SECTION III. SPECIAL CONDITIONS OF CONTRACT

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SPECIAL CONDITIONS OF CONTRACT (SCC)

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

1. **Definitions (GCC Clause 1)**

GCC 1.1 (g)—The **Procuring Entity** is: Project Director / Director General Drug Control & Pharmacy Services Khyber Pakhtunkhwa Peshawar.

GCC 1.1 (h)—The Procuring Entity's Country is: Pakistan

GCC 1.1 (i)—The **Supplier** supplying Goods and Services under this Contract is:

- i) Manufacturer and/or Importer and or Authorized agent of manufacturer registered with relevant sales and income tax authorities and have requisite qualification and eligibility for the requisite equipment as advertised in this bidding document.
- ii) Manufacturer of Laboratory Testing Equipment, Instruments & Accessories in Pakistan; and
- iii) Importer of Laboratory Testing Equipment, Instruments & Accessories in Pakistan.

GCC 1.1 (j)—The **Project Site** is: **Provincial Food and Drug Testing Laboratories, Phase-5, Hayatabad, Peshawar**.

2. Sample Provision:

a) Before the opening of the Financial Bid, as and when required, the Focal Person of the bidder will be informed on phone or through email by, to provide samples of the items specified the Executive Committee of the project, the Project Director / DG, DC & PS on Project Site or any other place notified by the procuring entity, at bidder's own risk and cost at the time and date communicated. The bidder shall arrange for demonstration of the items within the period specified by the Procuring Entity, for examination / analysis and scoring technical bids. The bidder must be prepared to do so by keeping one sample unit having same quoted/offered make/model with accessories ready at its disposal. Samples asked for specific items must be furnished free of charge and in a timely manner.

If Bidder fails to provide sample of items and fails to demonstrate the technical specification or performance of to the satisfaction of the Technical Evaluation Committee or the Procuring Entity the Bidder's Proposal for such items will be non-compliant / non-responsive and will be disqualified by the Procuring Entity in its sole discretion and their financial bids will be returned unopened.

b) The Procuring Entity will inspect and examine carefully, samples supplied by bidders. However, Procuring Entity will hold no responsibility for compensation for samples lost or destroyed during demonstration process. Samples will be returned immediately after demonstration process/ sample evaluation.

3. Country of Origin (GCC Clause3)

GCC 3.1—All countries and territories as indicated in Part Two Section VI of the bidding documents, "Eligibility for the Provisions of Goods, Works, and Services in Government-Financed Procurement". The bidder shall provide the details regarding country of origin, Model, Make, manufacturer, along with details of Manufacturing Units and mode of supply, shipment, and any other associated details of the component items and that of the quoted equipment. Bidders are bound to supply the equipment from quoted country of origin or authorized manufacturing site.

4. Performance Security (GCC Clause 7)

GCC7.1—The amount of performance security, as a percentage of the Contract Price, shall be: **Ten (10) percent** *of the Contract Price*

5. Standards (GCC Clause 4): As mentioned in GCC clause 4.1

6. Inspections and Tests (GCC Clause 8)

GCC 8.6—Inspection and tests in accordance with the clauses of contract with Procuring Entity: Inspection and tests include but is not limited to:

- Technical Evaluation shall be conducted by the Technical Committee or scrutiny Committee or as nominated by the Procuring Entity to undertake verification of documents submitted by the bidder/s along with the technical bids as well as to conduct the physical inspection of the various samples &/or relevant premises as per rent agreement or ownership etc. (Section-V Technical Specification of the Part II of these SBDs)
- Machinery & Equipment and other items supplied for sample tests shall be examined and tested by a panel of experts nominated for this purpose by the Procuring Entity for submission of technical report to the Executive Committee of Procuring Entity.
- Sample tests as well as pre-shipment inspections may also be carried out as and when needed before signing of contract agreement with the successful bidders for Machinery & Equipment, instruments etc.
- Any other appropriate method may be adopted by the Technical Committee, and / or Executive Committee to assess and/or assure the quality of goods being purchased. The Procuring Entity reserves the rights to reject the quoted items/ equipment at any stage before award of contract in case of any deviation from the standard specifications.
- Examine the original documents related to the fitness of the offered Goods / items in all respects including but not limited to Bill of Lading / Airway bill(s), Goods Declaration(s), Certificate/ Declaration of Conformity/ Compliances/ Analysis, invoice etc.
- The bidder will be disqualified for competition, if Procuring Entity declare that the bidder did not meet the mandatory technical requirements for qualification at the time of inspection as mentioned in Section IV. Technical Specifications
- Goods/ items will be examined and / or tested by Procuring Entity in a manner as deemed relevant and appropriate (including testing at specialized bodies). No claim for Goods/ items tested for quality will be entertained, costs of tests will be incurred by respective bidder.

Note: The Procuring Entity may inspect the premises of applicant bidder through panel of experts / Inspection team to verify the different parameters mentioned in technical bid submitted by the applicant bidder and noted here in this BSD if deem appropriate.

7. Packing (GCC Clause 9)

The goods, including all packaging and packing thereof, conform to the specifications of the Contract, including any applicable standards provided for in the Contract or, if no applicable standards are provided, the most recent authoritative standards issued by the relevant institution in the goods' country of origin. The goods

are securely contained, packaged and marked in accordance with normal commercial standards of export packing for goods of this type and in a manner so as to protect the goods while in storage or in transit to their ultimate destination.

8. Delivery and Documents (GCC Clause 10): Applicable

Delivery Mode: Delivered Duty Paid (DDP)

The Supplier shall provide the following documents: GCC 10.3— Up on shipment, the Supplier shall Notify the Procuring Entity the full details of the shipment, including Contract number, description of Goods, quantity and usual transport document. The Supplier shall mail the following documents to the Procuring Entity:

- i All documents submitted by the bidder as evidence shall be attested and the attestation shall be inked in original, documents where attestation is provided as a photocopy will not be accepted.
- ii Copies of the Supplier's invoice showing goods' description, quantity, unit price, and total amount;
- iii Original and two copies of the usual transport document (for example, a negotiable bill of lading, a nonnegotiable sea waybill, an inland waterway document, an air waybill, a railway consignment note, a road consignment note, or a multimodal transport document) which the buyer may require to take the goods;
- iv The Suppliers, shall make delivery of the goods in such number of days or date from the date of issuance of Purchase order and signing of the contract with the successful bidder in accordance with the terms specified in the Schedule of Requirements, Specific Technical Evaluation Criteria for each category (A, B, & C). The details of original documents to be furnished by the Supplier are as follows;
 - a. Operational Manuals of the Equipment. Service Manuals indicating step by step service / maintenance protocols of each Equipment.
 - b. Periodic Preventive Maintenance schedules with recommended list of Parts / Kits to be replaced during useful life.
 - c. A copy of Test / Inspection Procedure Manual of all equipment as duly recommended by the manufacturer. At the time of sample provision or at the time of final delivery the bidder may be required to perform all or any combination of random checks.
 - d. Product model and part numbers, bar code, QR Code (If available) and Catalogue.
 - e. Verifiable / Traceable Certificate of calibration of Equipment / item must be provided; Legible certificate indicating shelf life (where applicable);
 - f. Copies of the packing list identifying contents of each package;
 - g. Insurance certificate (where applicable);
 - h. Manufacturer or Supplier's warranty certificate;
 - i. Inspection certificate, issued by the nominated inspection Entity, and the Supplier's factory inspection report; and
 - j. Certificate of origin.

8. Insurance (GCC Clause 11)

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

9. Spare Parts (GCC Clause 14)

A list of recommended Spare Parts that usually require replacement over the life of proposed equipment / item must be separately provided. This requirement does not constitute any obligation for purchase of such spare parts.

10. Warranty (GCC Clause 15)

GCC 15.4 — **Execution of Warranty** Maintenance during warranty period will be the responsibility of the Supplier. An annual optimal uptime of 90% is considered as acceptable level of performance during the period of warranty.

The Procuring Entity shall promptly notify the supplier in writing for any claims arising under this warranty. Supplier will be bound to provide replacement of parts warranty instead of repair.

The Supplier will provide the recommended preventive maintenance schedule of each of the equipment at the time of delivery.

The Supplier will bound to execute the maintenance according to the manufacturer's recommended protocol and will replace the components / kits recommended by the manufacturers for installation and Periodic Preventive maintenance.

GCC 15.4— The maximum response time for maintenance complaint from the destination specified in the Schedule of Requirements (i.e., time required for supplier's maintenance engineer to report at the site after a request call /fax/ email, or any method of communication) shall not exceed 24 hours.

During the Warranty and the SLA, the supplier will be required to maintain the equipment in good working condition for a minimum period of 329 days out of a period of 365 days. i.e. (90% uptime). 8 hours non-functioning of the equipment will be considered as one day down time.

Essential period to shut down the installation entirely or partially shall also be included in the down time while calculating the 90% guaranteed uptime. This guaranteed uptime shall be calculated for each block of 365 days. The Response time to any fault should be not more than 48 hrs. In case the equipment cannot be made functional within 4 days or 96 hours, the supplier has to make arrangement for an alternative. Maximum time allowable for providing alternative equipment / item, correcting the fault would be Seven (07) continuous days.

GCC 15.5—In case equipment is not useable beyond the stipulated maximum down time the Supplier will be required to arrange for an immediate replacement of the same till such time it is so required. Failure to arrange for the immediate replacement of equipment will make the Supplier liable for a penalty at the rate of 0.25% of the price per non-functional unit per day and at 1.75% Week beyond the stipulated downtime period. The amount of penalty will be recovered from the performance security bank guarantee.

Down time is defined as the failure in the equipment operation to acquire or process the data or procedure, resulting in inability to carry out the required procedure properly.

Down time will start when the Lab In charge or any other individual of the procuring entity, (request call /fax/ email, or any method of communication inform the supplier regarding failure of equipment. Down time will end once the repairs have been affected and the system is again available for practical work.

Supplier will warrant that warranty for replacement of parts and equipment will be provided; no repairing warranty will be accepted. Software and hardware up gradation of the computing system should be carried out as available during warranty period as desired by end user or as recommended by the manufacturer.

Subject to **GCCSub-Clause 22.1(b)**, All such warranties for the goods shall remain in effect for a period specified in or for such other longer period that the original Supplier of original manufacturer normally provides for such goods or a longer period agreed upon in this Contract after the goods are placed in use (the "Warranty Period");

During any period in which the Bidder's warranties are effective, upon notice by Procuring Entity that the Equipment/ items do not conform to the requirements of the Contract, the Bidder shall promptly and at its own expense correct such non- conformities or, in case of its inability to do so, replace the defective goods with goods of the same or better quality or, at its own cost, remove the defective goods and fully reimburse Procuring Entity for the purchase price paid for the defective goods. In the event the Bidder fails to repair or replace defective or non-conforming goods within a reasonable time, Procuring Entity may replace or repair the goods and charge or debit the Bidder for all costs connected therewith or, if such replacement or repair is not practicable.

The Bidder shall remain responsive to the needs of Procuring Entity for any services that may be required in connection with any of the Supplier' warranties under the Contract.

If the Bidder is not the original manufacturer of the goods, the Bidder shall provide Procuring Entity with the benefit of all manufacturers' warranties in addition to any other warranties required to be provided under the Contract;

For goods ordered, the Supplier shall provide or maintain a Service Level reasonably constituted to handle requests from Procuring Entity or its Members or other ultimate beneficiaries for technical assistance on maintenance, service repairs, and calibration of the Equipment/ item once the Warranty period expires.

Guarantees:

Unless otherwise specified in the Contract, in addition to and without limiting any other warranties, remedies or rights of Procuring Entity stated in or arising under the Contract, the Bidder guarantees and represents that:

Availability of Spare Parts that usually require replacement over the life of proposed equipment / item must be separately provided. This requirement does not constitute any obligation for purchase of such spare parts.

The Supplier guarantees that the goods are fit for the purposes for which such goods are ordinarily used and for purposes expressly made known to the Procuring Entity, are of current manufacturer and are of even quality and free from defects in design, workmanship, material and manufacturing;

The Equipment/ items are of the quality, quantity and description required by the (BSD) / Contract, including when subjected to conditions prevailing in the place of final destination;

The Equipment/ items are free from any right of claim by any third-party, including claims of infringement of any intellectual property rights, including, but not limited to, patents, copyright and trade secrets;

The Supplier guarantees that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.

The Supplier further guarantees that the Goods shall be free from defects arising from any act or omission or arising from design, materials, and workmanship, under normal use in the conditions prevailing in the final destination.

The Bidder shall, in addition, comply with the guarantees associated with the performance and/or conformance specifications specified under the (BSD) / Contract. If, for reasons attributable to the Bidder, these guarantees are not attained in whole or in part, the Bidder shall, at its discretion, either:

a) Replace the equipment/ item in order to attain the contractual guarantees specified in the Contract at its own cost and expense and to carry out further performance / conformance tests in accordance with GCC Clause 10,

Or

b) Pay liquidated damages to the Procuring Entity with respect to the failure to meet the contractual guarantees. The rate of these liquidated damages shall be 0.25% per day to a maximum of 10% of the total relevant equipment/ item price.

In case of Failure to comply to the contractual guarantees once the liquidated damages are above 10% of the total relevant equipment/ item price and the contractual guarantees are not attained the contract will be cancelled the performance security will be forfeited and the supplier will be proceeded under blacklisting/ debarment mechanism of the Procuring Entity.

ACCEPTANCE OF GOODS: Under no circumstances shall the Procuring Entity be required to accept any goods that do not conform to the technical specifications or requirements of the (BSD). Procuring Entity may condition its acceptance of the goods upon the successful completion of acceptance tests as may be specified in (BSD) or in the Contract or otherwise agreed in writing by the Parties. In no case shall Procuring Entity be obligated to accept any goods unless and until Procuring Entity has had a reasonable opportunity to inspect the goods following delivery and all required satisfactory inspection reports have been provided to Procuring Entity. In no case shall delivery of equipment by Manufacturers and/ or Importers and/ or authorized agents to Procuring Entity in and of itself constitute acceptance of the goods. The delivered Equipment / Items / Goods will only be accepted when the equipment has been installed and preliminary inspection / verification of the required function of the equipment has been completed to the satisfaction of the Procuring Entity.

- **11. Payment (GCC Clause 16) Payment for Goods supplied:** Payment shall be made in Pak. Rupees in the following manner:
 - Payment shall be made in Pak. Rupees through crossed cheque in the following manner: 100 percent of the Contract Price of the Goods shall be paid to supplier within thirty (60) days after delivery & inspection by the Inspection Committee of intended goods at destination or, in case of any import, through irrevocable confirmed letter of credit opened in favor of the Supplier for supplying in Client's country, upon submission of documents specified in GCC Clause (16).
 - The Procuring Agency hereby covenants to pay the Supplier in consideration of the provision of the Equipment/ Goods and Services, as specified in the Schedule of Requirements in accordance

with the Price Schedule, the amount against the delivered equipment / goods and services or such other sum as may become payable under the provisions of this Contract.

- A copy of General Sales Tax ('GST') Invoice showing the amount of sales tax, must be submitted along with the Invoice. In case, GST is not applicable, the Supplier shall provide the documentary evidence to the said effect.
- Income/withholding tax shall be deducted at source as per applicable taxation laws, while making the payments. In case supplier claims any exemption from such taxes then supplier shall provide the documentary evidence to the said effect.
- No Payment will be made for partial and incomplete supply of Equipment/ items, for what so ever reason.

12. Prices (GCC Clause 17)

- The price will remain fix. All prices must include all the taxes and duties, where applicable. If there is no mention of taxes, the offered/ quoted price shall be considered as inclusive of all prevailing taxes/ duties.
- The bidder will not quote price of any item/s which is/are higher than the prices quoted by the bidder across the country to any procuring entity of the quoted item/s through public funding.
- In case the bid price is higher than estimated cost, the Procuring agency has the right to reject the bid and scrap the process without any liability.
- The procuring agency may carry out the market analysis before issuing a letter of consent to the successful bidder.

11. Subcontracts (GCC Clause 21)

Subcontracts are not allowed.

12. Liquidated Damages (GCC Clause 23)

• Applicable rate: 0.75% per day of the total Contract price. Maximum deduction: = 10% of the total contract amount. As in relevant clauses of the Contract Agreement signed by the Supplier with the Procuring Entity. Penalties shall be imposed as per contract agreement and blacklisting & debarment guidelines of the department if the firm deviates from Contract Agreement.

13. Disputes Resolution (GCC Clause 28)

• The dispute resolution mechanism to be applied will be pursuant to relevant clauses of Contract Agreement signed by Supplier with the Procuring Entity per law. In the case of non-resolution dispute shall be referred to adjudication or arbitration in accordance with The Arbitration Act 1940. If at all required, the jurisdiction of Court shall be of Peshawar, Khyber Pakhtunkhwa.

14. Governing Language (GCC Clause 29)

The Governing Language shall be: **English**.

15. Applicable Law (GCC Clause 30)

The Contract shall be interpreted in accordance with the laws of Islamic Republic of Pakistan, which includes but are not limited to the following legislation:

- i. The KPPRA Act 2012, KPPRA Rules 2014 and prevailing regulations etc.
- ii. The Contract Act 1872
- iii. The General Financial Rules of the Govt. of Khyber Pakhtunkhwa and all the relevant laws, rules and regulations pertaining to budgeting & financial management of public fund.
- iv. The Bonded Labor System (Abolition) Act of 1992.
- v. Child Labor (relevant Act Rule) e.g. Khyber Pakhtunkhwa Prohibition of Employment of Children Act, 2015.
- vi. The Factories Act 1934.
- vii. Companies Act 2017.
- viii. The Drug Act 1976, and Rules framed there under.
- ix. The DRAP Act 2012 and Rules framed there under.

16. Notices (GCC Clause 31)

GCC 31.1— Procuring Entity address for notice purposes: Project Director / Directorate General Drug Control & Pharmacy Services Khyber Pakhtunkhwa Peshawar, Block-B, Old FATA Secretariat Warsak Road Peshawar. Email: directorgeneraldrugs@healthkp.gov.pk Supplier's address for notice purposes: As mentioned in their bidding document

17. Duties & Taxes (GCC clause32)

The Unit price quoted by the bidder shall be inclusive of all applicable duties and taxes. All prices shall include relevant taxes & duties, where applicable. The benefit of exemption from or reduction in the GST or other taxes shall be passed on to the Purchasing Entity.

18. Legal Documentary Proof:

The Importers and/ or authorized agents must possess valid legally enforceable exclusive authorization from the Foreign/ Local Manufacturer; they should have a documentary proof to the effect that they are the original Manufacturer of the required goods. Bidders shall establish all legal documentary proofs where required/ ask by the Project Director (DG, DC & PS).

19. Ineligibility for Corrupt and Fraudulent Practices:

Bidders should not be under a declaration of ineligibility for corrupt and fraudulent practices issued by any Government (Federal, Provincial), a local body or a public sector organization.

20. Letter of Authorization:

The Authorized agent shall have to submit notary attested authorization / Sole Agency Certificate from Manufacturer and in case of Manufacturer, documentary proof to the effect that they are the original Manufacturer of the required goods shall be provided, or joint venture/ consortium/ alliance of the local Sole agents/manufacturers. In case of imported products, the authorization shall be notarized in the country of origin or or where the commercial office located for the quoted items. (NOTE: In case if the document is verifiable online then the notarization is not mandatory). Bidders shall provide letter of authorization from foreign/local Manufacturers whose shall not be in the process of winding up/liquidations.

In case of Manufacturers documentary proof to the effect that they are the original Manufacturer of the required goods shall be provided. In case of Importers and/ or authorized agents attested authorization / Sole importer / Sole Agent Certificate from the Manufacturer on their letter head shall be provided. Template has been provided in Section-VI of this (BSD) which may be followed for providing Authorization certificate.

21. Technical Staff and Tools:

The Bidder should have strong engineering background and necessary tools/ testing equipment, trained staff for the required after sales services of equipment / goods.

22. Deviation:

A. Minor Deviation

The Procuring Entity may waive off a maximum up to three minor informalities, nonconformities, in a bid which does not constitute a material deviation (or changes the substance of the bid), , as mentioned in the technical evaluation proforma, provided such waiver does not affect the performance of the equipment.

B. Major Deviation

Deviation in the specifications noted here in these bid solicitation documents where the performance of the equipment may affect shall be considered a major deviation.

Effect of the Major and Minor deviation shall be defined explicitly in order to avoid confusion later just like defined below for *"Material Deviation"*

23. Deviation from critical Provision:

Deviations from, or objections or reservations to critical provisions shall be deemed to be a material deviation from technical proposals and thus the bid will be declared as non-responsive. Any model supplied other than quoted and approved will be considered as deviation/ forgery and will be rejected straightaway at the cost and risk of the supplier.

24. Prevailing Rules, Regulation and Policies:

A bid once opened in accordance with the prescribed procedure shall be subject to only those rules, regulations and policies that are in force at the time of issue of notice for invitation of bids.

All bids shall be evaluated in accordance with the evaluation criteria and other terms and conditions

set forth in the bidding documents.

25. Alternate Bid:

Different models/ prices offered for a single item by the same bidder shall be considered as alternate bid and shall be non-responsive.

26. After Sale Service:

Certificate from the manufacturer that the after sales services / backup services shall be provided jointly with the local Importer / Sole Agent and in case of change of local agent, they will provide the after sales services themselves or through newly appointed agent for the period mentioned from the date of commissioning.

27. Testing and Calibration

The firm must have all kind of testing and calibration equipment, which is required to maintain the products, which they are dealing. The list of all required testing equipment would be provided along with the technical bid. The available testing equipment must be calibrated. The successful bidders shall provide complete technical manual and operation manual equipment / items to the end user.

28. Manufacturer Official Website:

The quoted model of imported product shall be available on the current official website of the manufacturer; otherwise, the quoted product shall be considered obsolete/ redundant and will straight away be rejected.

29. Inspecting the Premises:

The Procuring Entity has the right to inspect the premises of bidder to inspect the setups ensuring proper after sales services, documents mentioned in technical bids and any other relevant details regarding testing tools, calibration tools, spare parts etc. by relevant technical personnel.

30. Opening of the Financial Proposals:

After technical evaluation is completed, the Procuring Entity shall notify the date, time and location for opening of the financial proposals. Bidders' attendance at the opening of financial proposals is optional.

31. Incomplete and Conditional Bids:

Incomplete/ Conditional bid shall stand rejected. All items described in the technical proposal must be priced in financial proposal. No conditional bid in term of Technical/Financial bid will be entertained and the bidder will straight away be disqualified.

32. Bidders Influence:

Any effort by a Bidder to influence the Procuring Entity in its decisions on bid evaluation, bid comparison, or Contract Award will result in the rejection of the Bidder's bid and subsequent black listing, if Procuring Entity so desires. Canvassing by any Bidder at any stage of the Tender

evaluation is strictly prohibited.

33. Quantity Variation:

The Procuring Entity reserves the right at the time of Contract award to increase or decrease the quantity of goods as per permissible limits under the Rules 2014 originally specified in Schedule of Requirements without any change in unit price or other terms and conditions.

34. **OEM:**

The Manufacturer should have documentary evidence to the effect that they are the original manufacture of the quoted product/s with indication of manufacturing site and its location.

35. List of Related tools/parts:

The details regarding testing, calibration tools shall be submitted in bid which will be verified during inspection. The list is attached in this document and marks will be awarded after verification & recommendation by relevant technical personnel during inspection stages.

36. Technical Bid Submission Vis-à-vis Format:

The bidders will quote the technical bids on the format/ Form given in Section-VI Bid Forms "Returnable Schedules" the sample form.

SECTION IV. SCHEDULE OF REQUIREMENTS SCHEDULE OF REQUIREMENTS

- 1. All the bidders must submit the quotations of offered equipment / items on the format provided in **Section-VI "Bidding Forms"** under "Returnable Bid Forms" for category A, B, C & D.
- 2. In case of imported items of category, A, B, & C the quoted items shall be registered for use in their country of origin, for which the Importers should provide valid authorization Certificate for their quoted products duly notarized in the country of origin of the quoted items or where the commercial office located for the quoted items. Non-provision of notarized authorization for imports will lead to disqualification of firm in Category A, B and C.

(NOTE: In case if the document is verifiable online then the notarization is not mandatory)

3. All certifications of regulatory bodies, Manufacturer authorizations and data/ documents shall be valid and attestation shall be in original, photocopies and / or scanned documents will not be considered. Committee may carry out the verifications on or before award of contract and in case of any fraudulent practice; legal action will be taken against the bidder concerned. Any certificate expires before bid opening will not be entertained.

Valid Certifications of the following authorized regulatory bodies as well as any other relevant authorized regulatory body of Stringent Regulatory Authorities (SRA) countries that must cover the quoted equipment / items in its scope shall be acceptable:

Regulatory authory	ority	Certification
Australia	Therapeutic Goods Administration (TGA)	TGA Device License
Canada	Health Canada	Device License
		93/42/EC Medical Device
European Union	Regulatory agency in the European countries	Directive
		98/79/EC IVD Directive
		IEC 61010-1
		IEC 61010-2-40 for safety
Japan	Pharmaceuticals and Medical Devices Agency	Device License
Japan	(PMDA)	
Japan	Japan Industrial Standards (JIS)	
USA	Food and Drug Administration (FDA)	CFR 21-part 11
		CFR 21 relevant to testing
		devices
USA	U.S. Department of Agriculture (USDA)	
USA	Food Safety and Inspection Service (FSIS)	
ISO	International Organization for	ISO 9001:2015, ISO 9001-2000,
150	Standardization	ISO 7218, ISO 4887-
		2, ISO 17025:2017
	Association of Official Agricultural	
USA	Chemists (AOAC)	

4. All certifications (i.e Manufacturer authorization, certifications from accredited bodies, as the case may be, shall be valid and shall contain the quoted product(s) in its scope, moreover the accredited body shall be authorized to certify the quoted product(s). Committee may carry out the verifications on or before award of contract and in case of any fraudulent practice, legal action will be taken against the bidder concerned. Any certificate expires before bid opening will not be entertained.

- 5. Non-Provision of mandatory documents mentioned in these BSDs shall lead to disqualification of the firm / quoted items.
- 6. After sale satisfactory performance certificate and Satisfactory delivery completion/ performance certificates must be recognized from relevant forums having dispatch number, signature of the officer and date on letter head of procuring entity. The satisfactory performance certificate of non-recognized institution with relevant forums will not be considered.
- 7. The Procuring Entity, at any stage of the procurement proceedings, having credible reasons for or prima facie evidence of any defect in Supplier's capacities may require the Suppliers to provide information concerning their professional, technical, financial, legal or managerial competence as well as information regarding offered Goods/ Equipment.
- 8. The Procuring Entity has the right to inspect the premises of bidder (if needed) ensuring proper after sales services, verify documents (if needed) mentioned in technical bids and any other relevant details. Premises (office/workshop/warehouse) of bidder shall be insured through ownership/or Rent agreement.
- **9.** The bidder shall provide the shipment trail of the quoted item from the manufacturing site till destination.
- 10. The Bid security shall be from bank account of the bidder. Ordinary cheque and Payment Order (PO) in the form of bid security shall result in bid rejection.
- 11. Different models/ prices offered for a single item by the same bidder shall be considered as alternate bid and shall be non-responsive.
- 12. Any reservations on BSD including criteria, specifications etc (if any) shall be submitted in writing in the Pre-bid meeting by authorized person/representative of the firm during the period of Pre-Bid.
- 13. The schedule for supply of goods shall be as under:
- 14. Within 90 days from the date of issuance of supply order by the Procuring Entity for items to be imported for Category-A, B &C.
- 15. Successful bidders will be responsible for installation, testing & commissioning of the equipment. Successful bidders will ensure to train staff regarding method development, functioning, and calibration and troubleshooting of equipment.
- 16. All equipment must be capable of integration with Laboratory Management & Information System (LMIS) through Application Programming Interface (API) based connectivity with Procuring Entity's MIS and database through internet using WIFI or Ethernet.
- 17. Bid must include a manufacturer's brochure or leaflet describing the equipment being offered to enable offered specifications to be verified.
- 18. All brochures and leaflets submitted must be written in the English language or a translation into the English language.
- **19.** The following inspections and tests shall be performed:
 - a) The vendor must have the required Goods/ Equipment inspected in the manufacturer's works by a competent authority and submit a test certificate and also a guarantee/warranty certificate that the required Goods/ Equipment conform to written specifications.

- b) Procuring Entity through its representatives may decide to inspect and/or test any or all item of the required Goods/ Equipment to confirm their conformity to the contract, prior to dispatch from the supplier(s) premises. Such inspection and clearance will not prejudice the right of the Procuring Entity to inspect and test the required Goods/ Equipment on receipt at destination.
- 20. If the required Goods/ Equipment fail to meet the laid down specifications, the supplier shall take immediate steps to remedy the deficiency or replace the defective required Goods/ Equipment to the satisfaction of the Procuring Entity.
- 21. The firm shall have office/ sales service center preferably in in Khyber Pakhtunkhwa Province and any other Province of the Country through which the successful Supplier is able to provide after sale services to the Procuring Entity.
- 22. Equipment / Items, Strips, Swabs, Re-agents & Consumables etc. must be of fresh production, with a minimum of 75% of the shelf life upon manufacture remaining at the time of delivery.
- 23. Successful Supplier shall ensure to complete the supply of the Goods/ items at the earliest but not later than specified Delivery Period at Serial Nos. (15) & (16) above.
- 24. Conditional Bids will be disqualified.
- 25. Country of origin / manufacturing / assembly of the quoted brand / model must be clearly mentioned for each equipment offered by each bidder.
- **26.** Accessories: The Supplier shall provide Original Equipment/ Manufacturer's standard accessories/tools as well as all the accessories stipulated in the Technical Specification as a part of the equipment/.
- 27. Consumables during Commissioning: Supplier shall prepare & provide free of cost sufficient quantity of reagents, test piece, etc. required or consumed during commissioning, training of the installed equipment/ including instructions on operation and maintenance, wherever applicable.
- 28. Unloading at the port, customs clearance, inland transportation, unloading and unpacking at site, assembling and installation, testing, commissioning and instructions on site including labor and any equipment to be used during installation, and documentation shall be borne by the supplier/authorized representative in Pakistan.
- 29. Installation and Inspection: Each equipment/ shall be securely installed at designated locations in accordance with the instructions. Prior to the installation, the Supplier shall check and inspect all the connections and request the Procuring Entity to arrange the utility supply from installed outlet by making proper adjustment wherever necessary. The Supplier shall check all components of the equipment/ to ensure that their working conditions are good in presence of the Procuring Entity's representative(s)
- 30. Technically Qualified Bid will be the bid which substantially responsive and achieves minimum required technical score to qualify for Financial Evaluation. Bidders are required to comply "TECHNICAL SPECIFICATIONS" to be responsive and submit technical specifications of each equipment using template provided in Section-VI, Returnable Bidding Forms it as an essential element of the bid document supported by evidence. In case of Non-compliance "Zero" score will be awarded.

LIST OF EQUIPMENT

S.No	Item/ Equipment Name	Category of evaluation	No. of Units required
1.	Analytical Balance (For Food Lab)	A	3
2.	Ultrasonic bath sonicator (For DTL & Food Lab)	А	4
3.	HPLC with Quaternary Gradient system and built-in degasser	A	3
4.	Polari meter	A	2
5.	FTNIR	A	2
6.	Automatic Soxhlet System	A	1
7.	Sulphur-di-oxide Analyzer	A	2
8.	Amino acid analyzer	A	1
9.	Portable NIR spectrometer	А	1
10.	UV Spectrophotometer	А	3
11.	Freeze Dryer	Α	1
12.	Analytical Microbalance (For DTL)	А	2
13.	Differential Scanning Calorimeter (DSC)	А	1
14.	Automatic Digital Colony Counter	А	1
15.	COLUMNS for HPLC	А	20
16.	Flame Photometer	А	1
17.	Fully Automatic complete Kjeldahl Apparatus (nitrogen Distillation Unit + Digestion Block + Complete Automatic Set)	А	1
18.	Autoclave	A	1
19.	BOD Incubator	Α	1
20.	Gel Electrophoresis	А	1
21.	ULT Freezer Chest	А	1
22.	Analytical Balance 5 Digits (For DTL)	А	2
23.	TDS meter	А	2
24.	Water Activity Meter	А	2
25.	Moisture Analyzer	А	1
26.	EC conductivity bench meter	А	1
27.	pH Meter	А	3
28.	Rancimat	А	1
29.	Solvent Filtration Assembly	А	1
30.	Anaerobic Jar 1.5L~10L	А	1
31.	Refractometer	А	1
32.	Viscometer (Touch Screen)	A	1
33.	Auto Titrator (For both DTL and Food Lab)	А	1
34.	Milk Analyzer	A	1

35.	Automatic electronic pipettes (0.5 – 10ul, 1-20ul, 2-100ul, 10- 200ul, 15-300ul, 50-1000ul)	В	5
36.	Laboratory Oven	В	1
37.	Digital Burette	В	3
38.	Incinerator	В	1
39.	Lab Water Distillation Double Distillation	В	1 1
40.	Frost Free Double door (side by side) Refrigerator	В	1
41.	Water purifier	В	1
42.	Digital Dispenser (10ml, 50ml, 100ml) Set	В	2
43.	Top Loading Balance	В	4
44.	Vacuum Pump	В	2
45.	UV Lamps	В	1
46.	Fume Hood	В	1
47.	High Speed Centrifuge machine (For Food Lab)	В	1
48.	Centrifuge Machine (For DTL)	В	1
49.	Muffle Furnace	В	1
50.	Furnace (For DTL)	В	1
51.	Automated glassware washer	В	1
52.	Gerber Centrifuge	В	1
53.	Micro Filtration Assembly	В	2
54.	Multimedia Projector	В	1
55.	Still camera	В	1
56.	a. Computer with central work station (For DTL and Food Lab) b. Printers	В	20 20
57.	Photocopier	В	1
58.	UPS	В	10
59.	Stirrers	B	10
60.	Desiccators	B	2
61.	Mortar and Pestle	B	10
62.	Hot plate	B	2
63.	Magnetic stirrer + Hotplate digital	B	4
64.	Mechanical Shaker	B	1
65.	water bath	B	1
66.	Glassware drying cabinet (For DTL and Food Lab)	B	2
67.	Glassware (Beakers, Flasks, Cylinders, Pipettes)	B	20
68.	Solar system for Labs	B	5
69.	HVAC System for Labs	B	2
70.	Fire Sprinkler System for labs	B	2
70.	LAL test Kit for endotoxin	C	2
71.	Reference Standards	C C	 1 each
72.	Chemicals	C C	-
70.	AOAC Official Method of Analysis (OMA)	C C	1

DETAILED SPECIFICATIONS OF EQUIPMENT

Note:

21 CFR compliance is mandatory for all equipment/ items under Category-A

(Where Applicable).

S.No	Item Name	Required specification
Ι.	IA. HPLC WITH QUATERNARY GRADIENT SYSTEM AND BUILT-IN /ONLINE DEGASSER	HIGH PERFORMANCE LIQUID CHROMATOGRAPHY (HPLC) COMPLETE WITH ACCESSORIES (AUTO INJECTOR WITH TEMPERATURE CONTROLLED SAMPLE CHAMBER, TEMPERATURE CONTROLLED COLUMN CHAMBER, SOFTWARE), EQUIPPED WITH PHOTODIODE ARRAY DETECTOR. WITH COMPATIBLE SYSTEM WITH UPS WITH PRINTER
	CAT-A	
	DRUG LAB	 Quaternary Gradient Pump Operating Principle: Double / Dual plunger pump, Low pressure gradient. Control mode: Constant flow Flow Range:0.001 – 10ml/min Flow rate Accuracy:≤ ± 2% at Iml/min Flow rate Precision:<0.1%RSD at Iml/min Minimum Pressure:5000 PSI or better Number of Eluent Lines: 4 Gradient Formation: 4 Channel mixing value Composition Precision: Less than or equal to 0.2% or better Composition Accuracy:± 0.5% Delay volume is <650 µl (including Sample Management delay volume) – volume should be independent of system pressure Line Voltage: 220V
		 Vacuum Degasser Number of Channels: 4 Channels or better Maximum Flow rate: 10ml/min per channel > 0-2.0ml or better/min per channel for minimum 70% Gas Removal from mobile phase or better. Materials in contact with solvent: Teflon AF, PEEK and Glass- filled PTFE. Built in high efficiency, low volume, and vacuum degassing system with separate vacuum chambers for each solvent.
		 Column Oven: Temperature range: 4°C (Cooling) to 65°C or more. Cooling: Ambient: -10°C or better, Heating: ambient + 65°C or better Temperature stability: ±0.1°C Temperature accuracy: ±0.5°C, with 2-point temperature calibration Column capacity: Minimum Two

•	Column switching: Automatic /Optional
•	Heat-up time: 16 minutes from 4°C to 65°C
•	Cool-down time: 13 minutes from 65°C to 4°C
Dete	ector:
•	Photo Diode Array Detector: (PDA)
•	Wavelength source as 1 or 2 lamps for entire wave length range
	PDA AD Resolution: 14bit or better
•	
•	Pixel Resolution: Inm approximately
	No. of PDA Channel: 512 or better.
	Wavelength: $190 \sim 800$ nm with 1.2 nm digital and optical
	resolution
	Shield Optics
•	Path-length: 10mm
	Low noise sensitivity = $<10 \ \mu AU$
•	Drift: 0.0002AU/hr (Baseline Correction), 0.001AU/hr (Room
	Temp)
•	Wavelength Accuracy: <1nm (HY-1 Holmium Oxide Filter)
Auto	sampler:
•	Needle wash system as standard that uses fresh solvent with
	each injection.
•	Sample capacity: ImL x 100 or better
•	Dispenser syringe: 250 µL standard, 250/1000/ 2500 µL optional
•	Vial detection: Missing vial/well plate detection by sensor
•	Piercing precision needle:± 0.6mm
	Wash solvent: External wash solvent bottle
•	Injection cycle time: < 60 sec. in all injection modes for 1
	injection $\leq 100 \ \mu$ L including 300 μ L wash / ≤ 20 sec in partial
	loop fill mode for 1 injection of 10μ L including 500 μ L wash.
Auto	o sampler Accessories:
•	Sample tray of 100 x 1ml or greater.
•	Auto sampler Syringes: 100µl 200µl (2 each).
•	Sample delivery Precision: <0.5%RSD
•	Injection Accuracy: ±Ι μΙ
•	Injector Linearity: >0.999
•	Injection volume: 0.1 μ L – 100 μ L standards, should inject up to
	$2000 \ \mu$ with optional loop.
Was	
•	Programmable - Wash between injections, Wash between vials
Soft	ware:
•	Data System completes with Windows based software,
	Computer (Core i7 or better- 12th Generation or better) and
	Laser Printer.
•	The software must be 21 CFR Part 11 compliant (Mandatory).
•	The software must be capable to upgrade to network solution
•	Measuring: Simultaneous data acquisition from up to four
	independent chromatographs, each chromatograph can acquire

	data from up to 12 detectors.
	 Integration: There is extensive possibility to modify chromatograms. The chromatogram can be changed by entering global parameters or interactively, through direct graphic modification of the baseline.
	chromatograms and their mathematical modification; for example, mutual deductions or derivations of any order.
	 Calibration: Internal and external standard calculation methods, calibration of groups of peaks and reference peaks method for better identification.
	• Automated measuring support: Sequence tables for any set of
	samples with or without an auto sampler.
	 Additional accessories required for each unit:
	 Quartz / Fluoro-resin Flow cell (2 each)
	 Operating Windows: Microsoft Window 10 (Genuine)
	• Online UPS with minimum 60 minutes or above Backup.
1B. HPLC	COMPUTER CONTROLLED INTEGARTED QUATERNARY GRADIENT HPLC SYSTEM COMPRISING BELOW SPECIFICATION
With PDA DETECTOR (uHPLC)	HAVING WORKABLE PH RANGE OF I to 13 and material of Parts in
	contact with liquid Stainless steel (SUS316L, SUS316), FEP, PEEK, PTFE, perfluoro
	elastomer, ruby, sapphire, Hastelloy C, UHMWPE, ceramic, PFA,
	quartz, PPS
	Pumping System
	Pumping method: Parallel-type double plunge
	Flow rate: 0.0001 to 10 mL/min
	Flow rate accuracy: $\leq \pm 1\%$ or $\leq \pm 2 \mu L/min$
	Flow rate precision: < 0.06 %RSD or < 0.02 minSD
	Gradient Type: Low Pressure Quaternary
	Maximum pressure: 8500PSI or better.
	Degassing unit: 5 Stations online / built in degasser (Mobile phase 4 +
	Rinse solution)
	Gradient / concentration accuracy: ±0.5% (0.1 to 2 mL/min)
	Auto sampler:
	Injection volume setting range : 0.1 to 50 μ l
	Cross-contamination: not more than 0.0025% (Caffeine, Specified
	condition)
	Injection cycle time: should be less than 15 sec.
	Samples for processing: 336 (1 mL), 216 (1.5 mL), 112 (4 mL), 4 (MTP/DWP
	Sample cooler: 4 to 45° C (Room temperature needs to be 30° C or lower
	Injection linearity: 0.9999
	Column Oven:
	Heating and cooling

r	l	Mada di Fananda in sinaulatian mathad
		Method: Forced air circulation method
		Number of Column and Size: not less than 2 pieces of 10 to 30 cm
		Temperature control Range: Room Temp -12 to 90°C
		Detector Type: PDA
		Wavelength Range: 190 to 800 nm or above
		Spectral resolution: at least 1.4 nm
		Slit width: 1.2 nm, 8 nm
		Number of photodiode array Elements: 1024
		Noise level: not more than $\pm 3 \times 10^{-6}$ AU.
		EQUIPMENT CONTROL PANEL: color LCD touch panel allows user
		to operate the
		Instrument directly on HPLC.
		SOFTWARE: MUST BE CFR21 PART 11 COMPLIANT with FULL
		AUDIT TRIAL AND WEB CONTROL OPTION.
2.	COLUMNS FOR HPLC	(USP: L-I)
۷.	COLORING FOR FIFEC	4.6mm x 25cm, 5µm packing L-1 QTY: 03
	CAT-A	
	CAT-A	
		• HPLC COLUMN, L-I, ODS-3, 5µm, 4.6 X 250 mm
	DRUG LAB	USP Code :L-1
		 pH Range :2 - 7.5 or better
		<u>4.6-mm x 15 cm; 5µm packing, LI QTY: 03</u>
		 HPLC COLUMN, L-I, ODS-3, 5µm 4.6 X 150 mm
		USP Code :L-1
		• pH Range :2 - 7.5 or better
		F
		<u>3.9-mm x 15cm, 5µm packing L-1 QTY:02</u>
		 HPLC COLUMN, L-I, ODS-3, 5µm, 3.9 X 150 mm
		• USP Code :L-I
		 pH Range :2 - 7.5 or better
		3.9-mm x 30cm, 5µm packing L-1 QTY:02
		 HPLC COLUMN , L-1, ODS-3, 5µm, 3.9 X 300 mm
		USP Code :L-1
		• pH Range :2 - 7.5 or better
		(USP: L-7)

		4.6-mm x 25cm, 5µm packing L-7 QTY:02
		• HPLC COLUMN , L-7, C-8, 5µm, 4.6 X 250 mm
		• USP Code :L-7 (C-8)
		• pH Range :2 - 7.5 or better
		(USP: L-7)
		<u>4.6-mm x 15cm, 5µm packing L-7 QTY:02</u>
		 HPLC COLUMN , L-7, C-8, 5µm, 4.6 X 150 mm
		• USP Code :L-7 (C-8)
		 pH Range :2 - 7.5 or better
		(USP: L-10)
		4.6-mm x 25cm, 5µm packing L-10 QTY:01
		 HPLC COLUMN , L-10, 5µm, 4.6 X 250 mm
		USP Code :L-10
		 pH Range :2 - 7.5 or better
		4.6-mm x 15cm, 5µm packing L-10 QTY:01
		 HPLC COLUMN , L-10, 5μm, 4.6 × 150
		• USP Code :L-10
		 pH Range :2 - 7.5 or better
		4.6-mm x 25cm, 5µm packing L-11 QTY:01
		• HPLC COLUMN , L-II, PHENYL 5µm, 4.6 X 250 mm
		• USP Code :L-11
		• pH Range :2 - 7.5 or better
		4.6-mm x 15cm, packing L-11 QTY:01
		• HPLC COLUMN , L-II, PHENYL, 5μm, 4.6 X 150 mm
		• USP Code :L-11
		• pH Range :2 - 7.5 or better
		(USP: L-I)
		C-18, L-1, 2.1 mm x 50 mm, 1.9 μm, QTY:02
		UHPLC COLUMN , L-1/C-18,
		 2.1 mm x 50 mm, 1.9 μm
		 Pore Size :200 Å (20 nm)
		• pH Range : 1 - 10
		<u>C-18, L-1, 2.1 mm x 150 mm, 1.9 μm, QTY:01</u>
		• UHPLC COLUMN , L-1/C-18, 2.1 mm x 150 mm,1.9 μm
		 Pore Size :200 Å (20 nm)
		 pH Range : I – 10
3.	POLARIMETER DIGITAL	DIGITAL AUTOMATIC POLARIMETER
		Technical Specification :-
	CAT-A	• Light Source: LED
		 Measuring Range: ±89.99°Arc; ±259°Z
	DRUG LAB	• Wavelength: 589nm
		 Readable Accuracy: ±0.01°(optical rotation) ±0.03°Z (sugar)
		or better
		 Measuring Accuracy: ±0.01° (-45°. optical rotation ≤+45°;

		= 10.028 (action l matrix i = 2.458 = matrix i = 1.0028 (action l matrix i = 2.0028
		• $\pm 0.02^{\circ}$ (optical rotation < -45° or optical rotation > + 45°)
		Repeatability: ≤0.002° (optical rotation)
		• Measuring Model: Optical rotation, Specific Rotation.,
		Concentration., sugar degree
		Test Tube: Up to 200mm
		 Min. Transmittance : >1%
		 Temp. Control: Peltier 15°C~35 or better
		Calibration System : Auto calibration
		 Interface: USB, Wi-Fi
		21CFR Part 11 Yes
		 Power Supply: 220AC (±10%) 50 Hz
4.	FTNIR	Technical Specification :-
		 Michelson interferometer: (30° incident angle)
		Equipped with Advanced Dynamic Alignment system
	CAT-A	Sealed interferometer with Automatic Dehumidifier.
		Beam splitter: Silicon-coated CaF2for Near IR
	DRUG LAB	• Detector: must be with high linearity in room temperature
		detector. InGaAs Detector - or Silicon (850-1100 nm), Lead
		Sulphide (1100-2500 nm) detector must be provided
		 Wavenumber range: 12,500–240cm-1
		• Wavelength accuracy: Wavelength accuracy at least ±0.1 cm-1
		at 6,000 cm-l or better
		• Resolution: 0.25, 0.5, 1, 2, 4, 8, 16cm- 1 (Middle/Far IR)2, 4, 8,
		I6cm− I(Near IR)
		Light source: Tungsten
		Software capability: System software should contain Processing
		parametrs like compare, macro, peak table, peak height and
		peak area etc. Quantitative analysis with beers law, PLS, PCA, PLSR, PCR etc. Should be able to create and use spectral library
		 Branded PC (Core i7 / 16GB Ram (DDR4) / 1 Tb SSD) with
		licensed OS Windows 10 or better, FHD monitor, laser Printer
		 Branded online UPS for at least 60 minutes backup or better
		 Validation program: Complies with European, US, British, and
		Japanese Pharmacopoeias and ASTM
		 GLP/GMP support:
		 Tree-structured audit trail function Recording of operation logs
		and data logs (history) saving by overwriting the same filename should be prohibited.
		 Security functions: Coordination with Lab Solutions security functions
		 User-group based privilege settings
		 Search functions:
		 search of user library and commercial library, creation of user
		library
		 Library of approx. 12,000 spectra of organic compounds,
		polymers, pharmaceutical products, inorganic compounds, food
		additives, contaminants, etc.

5.	UV-VIS	Technical Specifications :
5.	SPECTROPHOTOMETER,	•
	(DOUBLE BEAM) WITH	7 8
	PC & PRINTER	 Source Lamp: Tungsten/ halogen/ deuterium/ Xenon lamps
	SOFTWARE	with 2 extra lamps.
	CONTROLLED.	Beam Type: Double
	CONTROLLED:	• Bandwidth (Variable): 0.2, 0.5, 1, 2, 4nm
		• Range : (nm): 190 – 1100nm
	CAT-A	Wavelength Accuracy: ±0.1nm
		 Wavelength Reproducibility: ≤0.2nm
	DRUG LAB	• Max Photometric-Concentration (C): 0-200%T, -0.3-3.0A, 0-
		9999C(0-9999F)
		 Stability: ±0.002A/h@500nm or better
		• Photometric Accuracy: 0.2%T(0-100%T), ±0.002A(0-0.5A),
		±0.004A(0.5-1A)
		 Photometric Repeatability: ≤0.15%T(0-100%T), 0.001A(0-0.5A), 0.002A(0.5-1A)
		 Wavelength Setting: Automatic
		 Wavelength Setting: High, Medium and Low
		 Scan Time Speed: High, Medium and Low
		 Detector: Dual Silicone photodiode
		· ·
		 Data Output: Powerful PC software, USB(A), USB(B) for printer data transfor
		printer, data transfer
		Display Type: LCD/TFT
		• Power (VAC): 230VAC / 50/60 Hz
		• 21CFR Part 11 Yes
		With PC along with software and Printer
6.	6A. WATER	Technical Specifications:
	DISTILLATION SYSTEM,	ASTM Water Grade Type I & II
		Capacity: 8 L/hr or better
	CAT-B	• TDS <ippm< th=""></ippm<>
		 Temperature: 25 to 35 °C
	DRUG LAB	Pyrogen content: Pyrogen free
	DROGLAB	 Water supply: I mL/min at 3 to 100 psi (20 to 700 kPa)
		Resistivity Threshold: 0.25 to 0.3 MΩ-cm
		• Tank – Minimum 30L (Stainless steel 304) or better
		Power (VAC): 220V AC
	6B. WATER DOUBLE	Technical Specifications :
	DISTILLATION SYSTEM,	Output : 4 Liter per Hour or better
		Power :220 V AC
	CAT-B	• TDS <0.5ppm
		• Conductivity µs/cm : <0.5
	DRUG LAB	Temperature : <35 °C
		Pyrogen content: Pyrogen free
		Thermostatic Cut-Out Yes
		Tank Capacity – 30 liter or better (Stainless Steel 304)
7.	VACUUM PUMP	Specifications :
	(DOUBLE HEAD)	 Maximum vacuum (mbar):100 or better
		• Maximum flow rate (L/min) at normal atmospheric pressure:
	•	

	CAT-B	34 or better
		With standard Hose connection
	DRUG LAB	Noise level (dB): 60 or less
		• Power : 220 V / 50 Hz
8.	ULTRAVIOLET (UV)	Specification:
0.	LAMP	 For already installed UV Spectrophotometer Schimadzu UV
		1800 Series
		• Tubes (Watt) : 4+4W
	CAT-B	 Wavelength (nm) :180-380 or better on either side
		 Intensity at 15cm (µw/cm2) : 300-350
	DRUG LAB	• Intensity at 15cm (µw/cm2) : 500-550
9.	PHOTO-COPIER	GENERAL SPECIFICATION:
		Photocopier machine A3/A5
	CAT-B	• Display :TFT/LCD display for easy operation
		• With console
	DRUG LAB	Resolution Scan: 600x600 dpi
		Resolution Print: 600 dpi
		• All in one function: Print, Scan, Photocopy
		• With zoom
		• Speed: 45 ppm or better
		• Paper capacity: 500 sheets or better tray 100 sheets or better multi
		bypass feeder.
		Continuous copies countdown
		• Number of papers tray: 2 trays + 1 by pass
		Warm up time: 12 second or less for warm up the machineBuilt-in duplexing
		 Built-in duplexing Document feeder: RADF/DADF/AFD
		Memory: 5GB or above
		• Power: 200-240 v
		• Connectivity: LAN, USB, and Wifi
		• Toner (Optional- Quote price Separately)
		Stabilizer:
		With Servo motor stabilizer.
10.	SINGLE PHASE (PURE	GENERAL SPECIFICATION :
	SINE WAVE) (UPS)	Watts: 1000W watt or better
	UNINTERRUPTED	 Input Frequency : 50-60Hz ± 10%
	POWER SUPPLY	 Output Frequency : 50 Hz ± 1% (Battery Mode)
	SYSTEM.	Battery Type: Maintenance Free battery enough for 3 Hours
		Back up Time with full load.
	CAT-B	
	DRUG LAB	
11.	INCINERATOR	• The Weste Incinerator (Weste Management & Treatment Science)
11.	TECHNICAL DETAILS	• The Waste Incinerator (Waste Management & Treatment System)
		shall be implemented as a turn-key project which shall comprise of a
		drug grade Incinerator including Dry Scrubber along with allied
	CAT-B	accessories and operational services for proper disposal of infectious
	CAT-B	solid hospital waste materials.

	• The incinerator be suitable for dry and wet infectious waste of the lab
DRUG LAB	plastic, paper, textile and rubber within average calorific value of
	2kW/kg.
	• The unit shall be of high performance, capable to operate continuously
	for 12 hours daily.
	• The primary source of fuel will be Natural Gas/ Diesel operated burner
	with the provision to operate on standby LPG fuel.
	• Continuous intervals feeding & burning capacity of 20kg/ hour or
	better
	• Combustion with smokeless emissions having standby fuel
	arrangements of LPG as an alternate fuel source.
	• Automatic air distribution and regulation system should be
	electronically controlled.
	• Smokeless emission for at-least 98% of running time and emission
	gases in air with then prescribe limit (EPA guideline)
	PRIMARY CHAMBER (COMBUSTION)
	• The temperature should not be less than 800C.
	• Separate manual door for ash removal.
	• Blower centrifugal fans shall be provided to inject air to burn the waste
	and gases in combustion chamber
	• A see through window with protection flap for inspection of burner
	flame should be available.
	• Electrically/ electronically controlled natural gas operated burner with
	the provision to operate on standby LPG fuel.
	• Thermocouple/ sensor to monitor the temperature of the primary
	chamber.
	• The post combustion chamber for flue gases to burn further for
	ensuring smokeless exhaust emissions.
	 Blower centrifugal fan(s) shall be provided to inject high pressure air
	to burn the waste and gases in post combustion chamber for ensuring
	proper burning of gases before exhaust. These fans will have an
	automatic servo controlled system for proper injection of air according
	to the requirements.
	• Electronically controlled automatic air distribution and regulation
	system.
	• The temperature should not be less than 1100°C.
	• Electrically/ electronically controlled natural gas operated burner with
	the provision to operate on standby LPG fuel.
	• Thermocouple/sensor to monitor the temperature of the secondary
	chamber.
	Control Box
	• PLC based control box with sealed door. The controls should be
	programmable for temperature adjustment, feeding intervals etc.
	• It should have provision for electronic ignition burner timer, feed
	interval timer, shut down timer, post combustion chamber temperature
	controller, and controls for burner, blower fans etc.

		at aj Elec Mar Ash Troi Inci Fire Fire	ppropriate si ctrical requin ual ash rem bin lley with con nerator site/ extinguishe extinguishe G cylinders 4	ite. rements, I roval tool ver for tra room er 10kg (Q er 20kg (Q	Line voltage ansportation Qty 3) Qty 1) bove size (0	e 220VAC n of laborat Qty 1)	50Hz ory waste	f emergency from lab to agency and
			plied firm w			-	-	oughout the
		EPA for 1	A approval b EPA approv	efore the al)	inspection			ponsible for ide affidavit
12.	MORTAR AND PESTLE	Specificatio	ons for Mor	tar & Pe	stle			
	CAT-C	S.N Cor o.	mposition	Shape	Capacity	Mortar Diamete	Mortar Height	Pestle Lengt
		I Por	celain	Round	I 25ml	r 75mm	50mm	h 102m m
	DRUG LAB	2 Por	celain	Round	300ml	100mm	90mm	152m m
		3 Por	celain	Round	500ml	125mm	90mm	165m m
13.	SOLAR SYSTEM FOR LABS	Installation			-	-	-	
	САТ-В	• Inve	00 Watts (I erter IP-65 p time prefera	rotection	n and the ca	apability to		
	DRUG LAB	 Out Free The N-t Lith Sup Box syst eart Gua 	put Voltage quency: 50H inverter she ype, bifacia ium-ion bate Qty plier will be , and distri	(Single p lz ould have I, A Grad tery 100A responsil ibution of lete earth tc as per Mounting	hase/Three load sharin le panels Sc Ah, 48V min ble for com f power and ning for bot NEPRA SO g structure	Phase) : 22 ng or parall blar 10000 \ nimum 600 plete instal d commissio ch AC and I PPs. for 10000 \	lel operation Watts 0 cycles o Ilation, dist oning of the DC, lightin Watts sola	on function. r better cribution ne solar g arrestors, r Panels,
			supplier wi uired load.	ll be resp	onsible for	complete c	cabling AC	as per

14.	HVAC SYSTEM FOR	Installation and commissioning of heating, ventilation, and air conditioning at	
• ••	DRUG TESTING LAB	provincial Food and Testing Laboratory Peshawar.	
	DIVUS ILJINIG LAD		
	CAT-B	• Estimated requirement of HVAC for Microbiology Laboratory is 8 TR.	
	DRUG LAB	• For other labs (clean rooms) at 1st floor is 14TR.	
		• For labs at basement (clean rooms) is 16 TR.	
		• Rate of HVAC will be calculated per TR (Comparison shall be	
		done per TR)	
		• Sterility room should be class B with HEPA filter followed by Class-	
		C in buffer.	
		Clean room should be Class D without HEPA filter	
		 Temperature rang can be adjust 18°C to 30°C 	
		• Humidity should be maintain 35 to 45 (±5%) percent inside the lab	
		• The supplier will be responsible to maintain positive reassure at	
		different area of the lab e.g. (sterility >buffer area> corridor> clean	
		rooms).	
		 Pressure and temperature indication should be installed front of 	
		room.	
		 Door air curtain should be installed entrance of the lab 	
		coating of 120 gm/ sq.m.) with fiberglass/ glasswool inside lab	
		cladding on exposed parts/weather proof.	
		• Supply / Return air Terminal Boxes to be mounted in false ceiling in	
		SS 304/316 construction complete with all accessories for fitting the	
		box. Boxes should be provided with top connection including taper	
		piece in SS construction. The Terminal box shall be with Volume	
		Control Damper with provision of controlling CFM from room.	
		 Fire Dampers provided in the supply and exhaust air systems shall 	
		be interlocked with the AHU blower motors such that in case of	
		fire, the AHU fan motor should trip automatically.	
		Alarm HVAC system failure alarm	
		Room/zone pressure failure alarm	
		• Smoke detection alarm and smoke extraction system should be	
		available	
		• Fire alarm system should be available	
		Installation of Fire Sprinkler System	
		NOTE: Prospective bidders shall visit the Food testing Laboratory	
		at Phase-V Hayatabad Peshawar, before Pre-bid meeting and bid	
		submission, for ascertaining the requirements / feasibility of the	
		site for installation of HVAC.	
		•	
15.	TOP LOADING	Max. Weighing capacity:- 3000 gm	
	BALANCES	 Minimum Display Readability:- 0.01g 	
		• Repeatability:- ± 0.01g	
	CAT-B	• Linearity:- ± 0.02g	
		 Appropriate pan size 	
	DRUG LAB	LED / LCD Display for easy viewing Calibration to Interval / External	
		Calibration : Intenal / External	
		Required Calibration Kit: Yes	
		With built in printer (Optional)	
		Rechargeable (optional)	

16.	ANALYTICAL BALANCES	TECH	NICAL SPECIFICATION	:-		
	WITH PRINTER	•	Max. Weighing capacity	:- 2	210 gm or better	
		•	Display Readability:-	0.1 mg / 0).000lg	
	CAT-A	•	Repeatability:-	0.1 mg / 0	0	
	•••••	•	Linearity:-	•	/ 0.0002g	
		•	Display Type :- LCD/LE			
	DRUG LAB	•	Appropriate pan size.			
					onds (typically) or better	
		•				
		•	Sensing method :- ±2pp	· · ·	,	
		•	Standard serial I/F :- US		face with vvindows	
			Communication with a	PCOR		
			Auto calibration			
		•	With Calibration Kit			
		•	Built in or External Prin			
17.	MICRO ANALYTICAL		O ANALYTICAL		WITH PRINTER	
	BALANCE	Tech	nical Specification :-			
	DALANCE	•	Maximum Capacity: 5	g or better		
		•	Readability: 1 µg	-		
	CAT-A	•	Repeatability, typical:	0.4 ug or hette	~	
			Linearity:- ±6 µg			
	DRUG LAB		,			
			Display : LCD / LED			
		•	Adjustment: Internal	· /		
		•	Interfaces:RS232 (inte	grated/optional)	/ USB	
		•	21 CFR Part 11 Com	pliant Weighing		
		•	Appropriate Weighing			
		•	Automation Options:	-	orkflows	
			With built in / externa			
		•		-		
		-	e tip cone should be uni			
		Suitab	le tips for all pipettes (l)	
			Range (Min-Max)	Accuracy		
	Automatic pipettes			(on full scale)		
	(10ul,20ul,100ul, 500ul, 1ml,		0510 1	. 10/	4	
	2ml, 5ml, and 10ml)		0.5-10 μL	±1%	-	
18.			10-100 μL	±0.8 %	-	
10.	CAT-B		100-1000 μL	±0.6 %		
			2-20 μL	±1%		
	FOOD LAB		20-200 µL	±0.6 %		
	FOOD LAB		5-50 µL	±0.8 %]	
			10-500 μL	±0.6 %		
		Calibr	ation: 3-point calibration		1	
			sories: Suitable pipette			
			1 1		fo disponsing of different	
					afe dispensing of different e chemicals from a bottle	
	Digital Dispenser (10ml,					
	50ml, 100ml) Set	-	-	ontamination fro	om the reagent bottles for	
			laboratory.			
19.	САТ-В	Ra	nge (Min-Max)	Accu	racy(on full scale)	
		Dis	penser, 1ml-10ml	$\leq \pm 0.$	$\leq \pm 0.5\%$	
	FOOD LAB	Dis	penser, 10ml-50ml	$\leq \pm 0.$	5%	
		Dis	penser, 50ml-100ml	$\leq \pm 0.$	5%	

[]		Dranision nictor to provent liquid offlorescent				
		Precision piston to prevent liquid efflorescence Calibration certificate.				
		Material:				
		Metal-free construction Comparison resistant components for high concentrated				
		• Corrosion resistant components for high concentrated				
		acids/chemicals				
		Accessories				
		• Adapters that comfortably fit most laboratory reagent bottles.				
		Dosing element with Exchange Unit/Dosing Unit with data chip:				
		Max. 2×800 Dosino or 2×805 Dosimat				
		Dosing steps per cylinder content : 800 Dosino: 10,000 pulses; 805				
		Dosimat: 20,000 pulses				
		Operation, dialog: Touch Control				
		Stirrers, titration stand : Incl. 802 Rod stirrer additionally				
		1×801 Magnetic stirrer or 1×802 Bod stirrer or				
		1×802 Rod stirrer or 1×802 KE Titration Stand				
		1×803 KF Titration Stand Attachment of Dosimats, Dosinos, stirrers: 2 MSB connectors				
	Auto Titrators (Min 25- Max	Attachment of Dosimats, Dosinos, suffers: 2 MSB connectors Attachment of Sample Changers (via USB)				
	100 ml Range)	Ethernet interface to connect to a local network for data archiving or				
20.		printing on network printers.				
40.	CAT-A	Temperature sensor: Pt1000/NTC				
		«iTrodes» – intelligent electrodes				
	DTL & FOOD LAB	GLP-compliant electrode test				
		pol and Upol – integrated programmable polarizer				
		DET Dynamic Equivalence-point Titration				
		MET Monotonic Equivalence-point Titration				
		SET Titration to a preset endpoint with automatic conditioning				
		STAT (enzymatic and pH-STAT titrations)				
		MAT Manual Titration				
		MEAS Measuring mode for pH, U/mV, T/°C				
		CAL Calibration with automatic buffer recognition				
		Calibration certificate.				
		• Calibration: Microprocessor controlled with built in Calibration				
	Digital Burette (50ml)	Program.				
		• Capacity: 50 ml or better,				
21.	CAT-B	• Subdivision: 0.01 ml				
		Accessories: Titration Tube, Telescopic filling tube, Adapters				
	FOOD LAB	Adjustable size				
		Calibration certificate.				
		Technical Specification:				
		Weighting Capacity: 220gm or better				
		Minimum Detection Limit 0.01mg				
	Analytical Balance	Pan size (mm): Approx. 91 mm dia.				
22.		Features:				
	CAT-A	Built-in calibration				
		Calibration kit				
	FOOD LAB	 Highest measurement accuracy and precision 				
		RS232C interface or USB				
		Necessary accessories				
		Daga 77 of 144				

		Calibration certificate.	
23.	Soxhlet Apparatus CAT-A FOOD LAB	Automatic Solvent Extractor SystemFully automated solvent extractor & fast, precise and accurate fat determinationTechnical SpecificationsPositions:6-positionsSample Capacity / Day: 42 or betterDisplay color touch screen - extractable Control Pad Solvent Recovery:> 85%Automation: Immersion, Removing, Washing, Recovery, Cooling Lighting: LED lights show 3/6 active positionsHeating Element: Glass ceramic/hotplate – 6 positions independent switch on/offSample Size: 0.5 to 15 g in 33x80 mm thimbles (generally 2-3 g)Seals: Viton, Butyl, and teflon or better Condensers: Glass/Titanium Interfaces for data collection 	
		Calibration certificate.	
		Range (Min-Max)	
24.	Sulphur-dioxide Apparatus CAT-A FOOD LAB	 Range (Min-Max) 0-10 ppm 0-25 mg/m³ Extended Ranges (Min-Max) 0-100 ppm 0-250 mg/m³ Detection Limit 2 ppb (10 second averaging time) 1 ppb (60 second averaging time) 0.25 ppb (300 second averaging time) Zero Drift <0.5 ppb (24 hour) Span Drift ±0.5% full-scale (24 hour) Response Time 60 sec (10 second averaging time) 110 sec (60 second averaging time) 320 sec (300 second averaging time) Calibration certificate. 	
	TDS meter	 Multipurpose/multifunctional TDS, conductivity, salinity Memory: 500 sets or better Display: LCD with backlight Interface for connectivity 	
25.	CAT-A FOOD LAB	 Accuracy of TDS Meter Conductivity: ± 0.5 µs/cm or better (Full Scale) TDS: ± 0.1 mg/L Temperature ± 0.5°C 	
		 Resolution: Conductivity: 0.01us/cm TDS: 0.01 mg/L to 0.1 µg/L or ppt 	
	L		

	Γ	T]		
		 Temperature: 0.1 °C Range (Min-Max): 			
		 Temperature Range: 0 to 100.0°C or better 			
		 Salinity 0.0-70.0 TDS 0.1000 mg/l or better 			
		• TDS 0-1999 mg/l or better			
		 Conductivity Range (Min-Max) 0.01 µs/cm to 1000 ms/cm or better 			
		With following accessories			
		• Conductivity Electrode with	built in Temperature		
		Sensor	1		
		• Electrode Stand			
		• All Standard solution			
		Calibration certificate.			
		• Range: 0.05–1.000 aw or better			
		 Resolution: 0.0001 aw or better 			
		 Accuracy: ±0.01 or better 			
		 Repeatability: 0.001 aw 			
	Water Activity Meter	Sensor Dew point or better			
26.		 Temperature Range: 15-50 °C or be 	tter		
20.	CAT-A	 Temperature Range: 13-50° C of be Temperature Resolution: 0.1 °C 			
		-			
	FOOD LAB	• Temperature Accuracy: ±0.1 °C			
		• Measurement time. Less than 05 mi	nutes		
		Provision of Calibration standards			
		Calibration certificate.	> 0.010/		
		Range of Moisture Measurement (Min-Max			
		Capacity (g)	0.5g to 60g or better		
		Sample Type	All Type of Food Samples		
		Repeatability	0.15% (2g), $0.05%$ (5g),		
		0.02%	(10g) 50 to 200 °C		
		Temperature Range Settings:			
		Operating Temperature / Humidity Range:			
		&	humidity conditions of Pakistan, especially		
		Peshawar.	Fakistan, especially		
		Display	LCD with backlight		
	Moisture Analyzer	Calibration	Auto / Self calibration		
	Wolsture / Maryzer	with	traceable reference		
27.	CAT-A	material for	calibration,		
		Automatic Self	Calibration		
	FOOD LAB	System as standard	Cultoration		
		Drying Heater	Infrared / Halogen		
		Timer Settings	1-99 Minutes		
		Connectivity / Interface / (Input & Output)	Wifi and/or Wireless		
		and/or	Bluetooth and/or RS-232		
			Terminal and/or I/O port		
			and/or USB port		
		Accessories: Reusable aluminum pans,	temperature calibration kits		
		(optional), Pans holder, Heater insulation			
		accessories.			
		Calibration certificate			
	1		Page 79 of 146		

·		
		Application: The flame photometer used for qualitative and
		quantitative determination of several cations, especially for metals that
		are easily excited to higher energy levels at flame temperature. These
		metals include Na+, K+, Ca 2+, and Li+.
		USB interface
		Elements detected K, Na, Li, Ca
		Sensitivity:
		K+- 0.01 ppm
		Na+- 0.01 ppm
		Li+- 0.1 ppm
		Ca++- 2 ppm
		• Range (Min-Max):
		K+ 0 ppm ~ 100 ppm
		Na+ 0 ppm ~ 160 ppm
		Li+ 0 ppm ~ 100 ppm
	Flame Photometer	Ca++ 0 ppm ~ 1000 ppm
		Method detection limit
28.	CAT-A	K+ ≤0.156 ppm
		Na+ $\leq 0.184 \text{ ppm}$
	FOOD LAB	$Li+ \leq 0.105 \text{ ppm}$
		$Ca++ \leq 2 ppm$
		• Linearity
		K- 0.195 ppm (0.39 ppm ~ 3.12 ppm)
		Na- 0.69 ppm (1.15 ppm ~ 9.2 ppm)
		Li- 0.15 ppm (0.25 ppm ~ 5 ppm)
		Ca- 3 ppm (5 ppm ~ 100 ppm)
		• Sample uptake < 6 mL/min
		• Response time 15s or better
		Accessories: Compressor with Air tank
		• Fuel: LPG or Natural Gas
		• Safety Feature: system with auto detection of flame failure and
		ignition system is mandatory.
		 Display: LED
		Calibration certificate.
		APPLICATION: Evilve outometed Kieldehl Analysis used to determine organic nitro con
		Fully automated Kjeldahl Analysis used to determine organic nitrogen
		and protein contents and other high temperature digestion processes in
	Fully Automatic Kjeldhal	food samples.
	Apparatus (Nitrogen	Kjeldahl Unit Should be combined unit with all units from the same
	Distillation Unit Digestion	manufacturer and consist of Digestion unit, Distillation unit, Scrubber
	Block Complete Automatic	and Auto titrator
29.	set)	Sample TypeRaw materials and finished Products inFood.
	CAT-A	Analysis time 10 minutes or better
		Measuring range (Min – Max) 0.1 - 200 mg N or better
	FOOD LAB	Nitrogen Reproducibility 1% RSD (including the digestion step)
		Recovery >99.5%
		Distillation Capacity ~40 ml/min
		Detection Limit $\geq 0.1 \text{ mg N}$
L	1	

1	
	Reproducibility 1% of RSD
	Tube draining200 ml in less than 10 seconds or better
	Temperature Control Accuracy-±0.5 °C
	Automated
	Automatic Steam Injection
	Automatic or Adjustable facility of steam power
	 Automatic addition of H₂O
	Automatic Water dilution
	Automatic addition of NaOH
	Automatic Addition of Reagents
	Automatic removal of distillation residue
	Programmable reaction time
	Programmable distillation time
	Digestion Unit and Distillation Unit
	• Automated Programmable Temperature Digestion unit.
	• Tube holding capacity: ≥ 20
	• Temperature: ambient upto 450°C
	• Temperature Stability: $\pm 1^{\circ}$ C or better
	• Digestion Time range: 1 - 999 minutes or more
	• Should have programmable time & temperature ramping and
	audible alarms
	Should be provided with Automatic motorized lifting of tubes
	from the heating unit.
	Accessories
	Exhaust Unit
	Rack, Stand, Lid
	 Digestion Tubes as per supplied unit
	 Handling device for digestion tubes
	 All other required accessories for standalone operation of the
	digester
	• Safe mode for reducing chemical spillage. Designed to
	Sale mode for reducing chemical spinage. Designed to
	neutralize toxic fumes produced during mineralization.
	• The material of construction of the scrubber should be of high
	endurance materials like borosilicate glass or high-quality stainless
	steel/pvc.
	Auto start from Digestion System
	• Cleaning shall include condensation, neutralization, adsorption
	and redox reactions to maintain efficiency of the equipment
	• Suction should be regulated/ adjustable to achieve efficient
	digestion.
	Automated Distillation and Titration Unit
	Automated addition of reagents.
	Should be completely programmable for all controls like
	cooling water, dilution water, sodium hydroxide, receiver solution,
	automatic calculation, automatic emptying of tube, titration vessel.
	• Should have built-in colorimetric titration system and allow use
	of a wide range of indicators.
	• Should have possibility for bypassing automatic titration
	system to allow manual titration

-		
		 Minimum dispensing volume: 2 - 3 μL
		• Automatic waste removal via tube drainage after distillation
		• The system should be able to store the recorded data and must
		have facility for downloading the same using an USB port or through
		Wi-Fi or connectivity for LIMS
		• Additionally, it should be possible for transferring weights and
		retrieving data using suitable software which is compliant to
		traceability.
		• The system should have safety sensors and audible warning
		systems
		• Should be provided with exchangeable splash head to reduce
		carry-over effects
		• The system should be provided with suitable password
		protection to prevent tampering of programs and data.
		• The system must be compliant to ISO 17025:2017
		• The system shall have the possibility to track performance of
		the system and warns if analysis results changes over time. It is
		desirable to have component traceability feature in the system for
		effective maintenance of the system.
		• The instrument shall be delivered with a Verification Test
		document that certifies that instrument has been performance tested in
		factory (confirming analysis performance).
		Spares and Accessories
		All Chemicals and reagents for 200 runs
		• All supplied reagent containers must be ≥ 2 L made of high-
		quality borosilicate glass
		Reference Standard: All reference standards shall be provided,
		Certified and traceable to international standards
		Reference Method
		• Verified method as per official standards such as AOAC, EPA, ISO
		Operating Manuals, Service Manuals, Other Manuals
		 Installation, Operation, and Maintenance.
		Recommendations or Warnings
		• Ensure safety with advanced features and automatic alerts.
		• Distillation temperature monitoring and warning provision should
		be there to ensure real time monitoring of temperature of distillate
		thereby ensuring accuracy of results
		Digital Connectivity
		• The instrument shall be fully capable of digital connectivity
		capable of integration with Laboratory Management & Information
		System (LMIS) through Application Programming Interface (API),
		Direct connectivity, Ethernet, Wifi, Bluetooth etc.
		List of Spares and Accessories
		List of all spares and accessories (including minor) with part numbers,
		required for maintenance and repairs in future after guarantee/
		warranty period should be attached.
		UPS
		Suitable Online 5 kVA to support the equipment
		Quality Requirement
		Calibration certificate
30.	HOT PLATE	Application:

		Hot plates are generally used to heat liquids as a part of sample		
	САТ-В	preparation for analysis		
		Heating Plate	Top Plate Material - Cast Iron	
	FOOD LAB	e	Ceramic Coated resistant to acids, bases Body	
		Material –	Mild Steel	
		Finish –	Powder Coated	
			arate Temperature Control Unit with PTFE or any	
		acid resistant cord connection		
		Ideal for heating samples and concentrated acids		
		Temperature: Maximum temperature 250°C		
		Overhead stirrer (optional)		
		 PID Controller 		
			l heating plate	
		Support stand	• •	
			g and display for temperature and time	
		warning displ		
		Calibration ce		
		Technical Specs		
		Digital Bench Top		
		Microprocessor Cont	rolled	
		Conductivity Range	0.0 1uS/cm to 1000 mS/cm or better	
		Accuracy	0.5%,	
	EC meter	Resolution:	0.01%	
		Temperature Range	0 to $+100.0^{\circ}$ C or better	
31.	CAT-A	Salinity	0.0-70.0,	
		TDS	0-1999 mg/l	
	FOOD LAB	Mandatory accessor	ries.	
		a) Conductivity	Electrode with built in Temperature Sensor	
		b) Electrode Sta	nd with Base	
		c) Standard solu	tion 50 ml	
		Calibration certificate	2	
		PH Meter Digital B		
		Microprocessor Controlled		
		PH Range 0 to 14		
		PH Resolution 0.01 c		
		pH Accuracy: ± 0.00		
	pH Meter	MV Range ±1200.0n		
22		Temperature Range -		
32.	CAT-A	Temperature accurac		
		Three Point Calibrati	on System	
	FOOD LAB	Accessories:-	th have	
		a) Electrode stand wi	th base.	
		b) Beaker 50 ml.	50 ml	
		c) 3M KCL Solution 50 ml.d) Calibration Standard solutions PH 4, 7 & 10, (50ml each).		
	MECHANICAL SHAKER		e with Built in Temperature Sensor.	
	WECHANICAL SHAKEK	Application:	re combination of traditional insubators and a	
33.	САТ-В	Shaking incubators are combination of traditional incubators and a laboratory shaker used to simultaneously incubate and shake or agit		
	UAI-D	-	a to simultaneously incubate and shake of agitale	
1		samples.		

	FOOD LAB	
		Shaker requirements
		Digital speed controller & timer
		Acceleration circuit to prevent sudden start and stop should be
		available
		• Timer 1 to 99.9 hours continuous mode OR better
		• UV germicidal lights.
		Noiseless operation
		Shaking Speed range: 25 to 400 rpm or better with \pm 2 rpm accuracy
		Temperature range: 5° C to 80° C with accuracy of $\pm 0.1^{\circ}$ C
		LCD display
		Audible and Visible Alarm
		Should indicate when speed deviates more than 5 rpm or temperature
		deviates more than 1°C from set point, and when timer operation has
		expired.
		Accessories
		1. Universal Platform of at least 40 x 40 cm having capacity to
		holds assortment of various size of flask sizes up to 2 Ltrs and test tube
		racks.2. System should be supplied with 125ml clamps (10 Nos.), 250
		ml clamps (5 Nos.), 500 ml clamps (05 Nos.), 1000 ml (02 Nos.) and
		2000 ml (01- 02Nos)
		3. Test tube rack for 20x50ml tube-1 no and test tube rack for
		42x15ml tubes-1
		Calibration certificate.
		Max. speed: (15000 rpm) or better
		No of Rotors: 12
		Automatic imbalance detection
		Acceleration time = $14s$ or better
		Deceleration time = $15s$ or better
	High Speed Centrifuge	Timer = $30s$ to 99.59 hours with continuous run function.
34.	machine	Rotors Capacity= 48 x 1.5/2.0 mL
54.	САТ-В	24 x 1.5/2.0ml tubes,
	CAI-D	$6 \ge 15/50$ ml tubes and
	FOOD LAB	64 x 0.2 ml per tubes
		Noiseless and vibration free (< 60db or better).
		Digital display of speed, timing.
		Lid safety interlock
		Calibration certificate
		Furnaces have a hinged vertical lift door to keeps the hot door insulation always facing away from the operator.
		A door safety switch interrupts power to the heating elements when the
	Muffle Furnace	door is opened.
	Mullic Fullace	• 1200°C or better operating temperature
35.	САТ-В	Vacuum formed ceramic fiber heating elements ensure rapid heat up
		excellent temperature uniformity and quick cool down
	FOOD LAB	Insulation. 1. Multiple layers of high quality, asbestos-free ceramic
		fiber insulation. 2. Must have the Heating elements safely positioned,
		covered with ceramic plates.
		·

	1	Temp (°C)1200 or better	
		1 2	
		Heat Zones: 1	
		Chamber capacity: 5 Liter or better	
		Temperature measurement by thermocouple Type "K"	
		Accessories:	
		i. Protection Glove 2 pairs ii. Crucible Clip 2 pair iii. Crucibles 12 pcs	
		Calibration certificate	
		Capacity : 3.00 Litre	
		Temperature Range : 100° C - 1100° C / 1°	
	FURNACE	Resolution Hold Time Range: 0:00 - 99:59 (hours: minutes) / 1 Min	
	FURNACE	Resolution Ramp Rate Range: 0 - 40.0°C/minute / 0.1°C	
26		Resolution Temperature Accuracy: $\pm 2^{\circ}C$ (at 1150°C)	
36.	САТ-В	Temp. Controller: PID control by microprocessor	
		Heater: Iron-chrome wire, 1.5kW Max. temp. reaching time: Approx.	
	DRUG LAB	60min Sensor: R-thermocouple Exhaust port: 18 mm I.D. (upper part)	
		Cooling Fan Type: Axial fan motor Overheat protection: Integrated	
		controller / Digital setting	
		PID Temperature Control	
		Dust Free	
		Display: LED/TFT	
		Temp Range. Ambient +5 to 250 °C or better	
	Laboratory Oven	Temperature Accuracy $+-1$ °C	
	Laboratory Oven	Digital counter with target time setting, adjustable from 1 minute to	
37.	САТ-В	h hours or better.	
	CAI-D		
		Safety Alarm: Required Material of construction: Stainless Steel	
	FOOD LAB		
		Shelves. 02 (adjustable) or better	
		Capacity 50 Liter or better	
		Calibration certificate	
		Determination of the oxidative stability of foods, oils and fats	
		Analysis on whole sample, without preliminary fat separation	
		Technical Data:	
		Pressure range: $0 - 8$ bar or better	
		Temperature range: from room temp. to 110°C or better	
		Number of oxidation chambers: 2 or better	
38.	Rancimat	Capacity single chamber: up to 100 ml	
50.	Kancimat	Interface: USB	
	CAT-A	Overpressure: safety valve	
		Out of range temperature: visual alarm	
	FOOD LAB	Damaged probe: visual alarm	
	FUUD LAD	With sample holders, with Computer	
		Along with all the accessories	
		Calibration certificates.	
		Calorimeter is required to calculate the total energy value of the food	
		products	
	Calorimeter	Specifications Requirement	
39.		Instrument Fully Automatic Calorimeter for rapid determination of	
	САТ-А	Gross Calorific Value of food items.	
		Temperature resolution 0.00010C or Better	
1			
	FOOD LAB	Reproducibility/Repeatability<0.1% RSD or better	

г				
		Unit of measurement CAL and KJ		
		Memory 1000 test or Higher		
		Pelletizer Suitable for pelletizing food samples.		
		Sample weight 0.5 to 1.0 g, or better		
		Calories Energy Measurement Range 25 – 10000 Calories or more		
		Jacket Type Isoperibol, water jacket		
		Bomb Type Removal bomb and bucket type		
		Bomb standards Comply with ASTM E144		
		Network Interface Suitable interfaces for PC, Printer & Balance with USB type port.		
		Oxygen filling Automatic		
		Calculation Provision for correction facilities due to moisture Fibre, spike weight, Ash for further calculation of Gross Calorific Value.		
		Calibration Standards Certified values of Certified Reference Materials (CRM) provided by an accredited Reference Material		
		Producer with stated metrological traceability to the SI		
		Oxygen cylinder Oxygen Cylinder 2 nos		
		Cylinder regulator with adapter for filling the bomb – 1 no		
		Accessories Ignition wire – Additional 10 Nos Cotton thread – 1000		
		Pcs Combustion crucible – 25 Pcs Bomb – Additional 3 nos		
		NIST certified Benzoic for calibration		
		Any other accessories required for analysis of food samples.		
		calibration certificates		
		Total system band spread, $5 \leq 12\mu L$		
		Dwell volume (total system) ≤400μL (includes standard 100 μL mixer) Gradient delay		
		Volume		
		\leq 300 µL (includes standard 100		
		μL mixer) Integrated leak		
		management		
	Amino acid analyzer	Leak sensors, as standard, and safe leak handling Quantum		
40.	CAT-A	synchronization Injection		
40.	CAI-A	synchronization between pump		
	FOOD LAB	and sample manager enhances		
	FOOD LAD	retention time reproducibility		
		Settable flow rate range 0.010 to 2.000 mL/min, in 0.001 mL increments (firmware version 1.5x and earlier)		
		0.010 to 2.200 mL/min, in 0.001		
		mL increments (firmware version 1.60)		
		0.001 to 2.200 mL/min in 0.001 mL increments (firmware version 1.65 and later)		

rr		
	Maximum operating pressure	15,000 psi up to 1.0 mL/min, 9000 psi up to 2.0 mL/min (firmware version 1.5x and earlier)
		15,000 psi up to 1.0 mL/min, 7800 psi up to 2.2 mL/min (firmware version 1.6x and later)
	pH range	1 to 12.5
	Unattended operation	Leak sensors and safe leak handling, full 96-hour diagnostic data display through xconsole software
	Cycle time	≤30 s inject-to-inject
	SOLVENT MANAGER	
	Number of solvents	Blend up to four solvents in any combination (standard)
		Expanded solvent choices with optional six-port solvent select valve
	Solvent degassing chambers	Integrated vacuum degassing, four
		One additional chamber for the SM- FTN-H purge solvent
	Solvent blending	Automated, on-line pH, ionic strength, and organic modifier blending from pure solvents
		with Auto•Blend Plus [™] Technology
	Gradient formation gradient	Low-pressure mixing, quaternary
	Gradient profiles	11 gradient curves (including linear, step [2], concave [4], and convexe
	Pressure pulsation greater	$\leq 1.0\%$ or 25 psi, whichever is
	Flow accuracy	±1.0% at 0.5 to 2.0 mL/min using 100% A (with i2Valve)
	Flow precision whichever is greater, based Composition ripple [†]	\leq 0.075% RSD or \pm 0.01 min SD, on six replicates (with i2Valve)
	(baseline noise) optional 250 μL mixer) (with i2	≤1.0 mAu (≤0.1 mAU with Valve)
	Composition accuracy to 90% from 0.5 to 2.0 mL/min	$\pm 0.5\%$ absolute (full scale) from 5%
		$($ $v_1 (11 12 v a) (0)$

PrimingW to 4 mL/minPump seal washE system to flush the rear of the high Flow rampingR 2.00 mL/min Default: 0.45 min to r Primary wetted materialsPrimary wetted materials3 fluoropolymer, fluoroelastomer, U zirconia, Nitronic 60, DLC, PEEK isSAMPLE MANAGER Injection volume range0 1000.0 μ L with optional extension Accuracy (aspiration)Accuracy (aspiration) \pm removed from vial with 10 μ L inject Sy LinearityPrecision \leq Number of sample platesNumber of sample platesA A	ontinuous Vet priming can run at flow rates up quipped with an automated wash pressure seal and the plunger ange: 0.01 to 30.00 min to reach each 2.00 mL/min 16L stainless steel, PPS, JHMWPE blend, sapphire, ruby, and PEEK blend, titanium alloy
PrimingW to 4 mL/minPump seal washE system to flush the rear of the high Flow rampingR 2.00 mL/min Default: 0.45 min to r Primary wetted materialsPrimary wetted materials3 fluoropolymer, fluoroelastomer, U zirconia, Nitronic 60, DLC, PEEK SAMPLE MANAGER Injection volume range0 0 1000.0 μ L with optional extension Accuracy (aspiration)Accuracy (aspiration) \pm removed from vial with 10 μ L inject Sy Linearity20 Sy LinearityPrecision \leq Number of sample plates A Sy Sy Sy	 Vet priming can run at flow rates up quipped with an automated wash pressure seal and the plunger ange: 0.01 to 30.00 min to reach each 2.00 mL/min 16L stainless steel, PPS, JHMWPE blend, sapphire, ruby, and PEEK blend, titanium alloy 1 to 10.0 μL as standard, up to
system to flush the rear of the high Flow rampingR 2.00 mL/min Default: 0.45 min to r Primary wetted materialsPrimary wetted materials3 fluoropolymer, fluoroelastomer, U zirconia, Nitronic 60, DLC, PEEK SAMPLE MANAGER Injection volume range0 1000.0 μ L with optional extension removed from vial with 10 μ L inject Sy LinearityLinearity \geq Precision \leq \leq Number of sample plates	pressure seal and the plunger ange: 0.01 to 30.00 min to reach each 2.00 mL/min 16L stainless steel, PPS, JHMWPE blend, sapphire, ruby, and PEEK blend, titanium alloy 1 to 10.0 μL as standard, up to
2.00 mL/min Default: 0.45 min to r Primary wetted materials 3 fluoropolymer, fluoroelastomer, L zirconia, Nitronic 60, DLC, PEEK SAMPLE MANAGER Injection volume range 0. 1000.0 μL with optional extension Accuracy (aspiration) ± removed from vial with 10 μL inject 20 Sy Linearity ≥ Number of sample plates A	each 2.00 mL/min 16L stainless steel, PPS, JHMWPE blend, sapphire, ruby, and PEEK blend, titanium alloy 1 to 10.0 μL as standard, up to
fluoropolymer, fluoroelastomer, Uzirconia, Nitronic 60, DLC, PEEK SAMPLE MANAGER Injection volume range 0. 1000.0 μL with optional extension Accuracy (aspiration) ± removed from vial with 10 μL inject 20 Sy Linearity Precision ≤ Number of sample plates A	JHMWPE blend, sapphire, ruby, and PEEK blend, titanium alloy 1 to 10.0 μL as standard, up to
Injection volume range 0. 1000.0 μL with optional extension 4 Accuracy (aspiration) ± removed from vial with 10 μL inject 20 Sy 1 Linearity ≥ Precision ≤ Number of sample plates A . .	
$1000.0 \ \mu L$ with optional extensionAccuracy (aspiration) \pm removed from vial with 10 μL inject 20 SyLinearity \geq Precision \leq Number of sample plates A	
removed from vial with 10 µL inject 20 50 50 50 50 50 50 50 50 50 50 50 50 50	
Linearity Precision Number of sample plates A	$0.2 \ \mu L$ (measured by fluid weight etions averaged over
Precision \leq Number of sample plates A) injections using standard 100 μ L yringe)
Number of sample plates A	0.999 (standard needle)
Number of sample plates A	1% RSD, 0.2 to 1.9 μL
Number of sample plates A	0.5% RSD 2.0 to 4.9 μL
•9	0.25% RSD 5.0 to 100.0 μL
• 2	ny two of the following: 96 and 384 microtiter plates 48 position 2.00-mL vial plates
	48 position 0.65-mL micro- centrifuge tube plates 24 position 1.50-mL micro- centrifuge tube plates
Maximum sample capacity 70 2-mL vial holders, four additional p	58 in two 384-well plates or 96 in positions for dilution functions
Sample compartment 4. increments	0 to 40.0 °C, settable in 0.1 °C
Temperature accuracy ±	0.5 °C at sensor
1 5	1.0 °C at sensor
Sample Specification	
Sample manager heat time \leq	30 min ambient-40 °C
Injection needle wash programmable	60 min ambient-4 °C
Minimum sample required 3	60 min ambient-4 °C Integral, active,

	2-mL vials (zero offset)
Sample carryover	$\leq 0.002\%$ caffeine (UV)
	$\leq 0.002\%$ sulphadimethoxine (MS)
Advanced Sample Manager capabilities Auto-dilution, auto-addition and load-ahead	
Primary wetted materials stainless steel, Vespel SCP, PEE	316L stainless steel, gold plated K blend, DL
mm in length with filter or guard CH-30A: Single column, up to 4 300 mm length with filter or gua Column compartment 20.0 to 9 temperature range Column compartment ± 0.5 °C a Column compartment ± 0.3 °C a Column compartment heat time Solvent conditioning	 4.6 mm internal diameter (I.D.), up to rd column 90.0 °C, settable in 0.1 °C increments t sensor temperature accuracy t sensor temperature stability
management tracks and archives	
Fluorescence Detector	
Column compartment heat time \leq	15 min ambient-60 °C
Column compartment cool time Solvent conditioning Column tracking information management tracks an	Active pre-heating as standard eCord Technology column
2D support	Optional
Wavelength range 900nm(emission)	200 to 890 nm (excitation) 210 to
Bandwidth	20 nm
Wavelength accuracy	$\pm 3 \text{ nm}$
Wavelength repeatability	±0.25 nm
Sensitivity* spectrum of H20)	S/N >1000 (Raman
Measurement range	0.001 to 10,000 EU
Data acquisition	Up to 80 Hz
Unattended operation captured through console software	Leak sensors, full diagnostic data
Food & Feed Chemistry Kit - A	Automation

		C 1 C 1 X 100 1		
		Column 2.1 X 100mm, x 1		
		Eluent A (950mL), x 1 Eluent B (950mL), x 1		
		Derivatization Kit – Automation, 96 analysis, x 5		
		Amino Acid Food and Feed Standard Kit, x 1 Amino Acid Internal Standard-Norvaline, x 1		
		96-well Sample Collection Plate, 800 µL Round well, 50/pk, x 1		
		Cap mat, 5/pk, x1		
		C18 column for Aflatoxins		
		pH Range 1-12		
		pressure 18000 psi		
		perker style		
		surface Area 185		
		Carbon Load 18%		
		Note; System Should be capable to analyze Amino Acids and		
		Aflatoxins, ochratoxins and Mycotoxins by Same system.		
		Water bath is a laboratory unit with digital PID controller and LED		
		display for optimized temperature uniformity. Insulated stainless steel chamber and high temperature powder coating		
		exterior provides protection against corrosion and chemical damage.		
		It includes lid with concentric rings for easy placement of flasks and		
		reduces heat loss.		
		Microprocessor controlled system (consistent results)		
	Water bath	Digital display		
41				
41.	САТ-В	Aluminum cover (high thermal conductivity)		
		Over temperature alarm for safety Built-in internal drain		
	FOOD LAB			
		Easy to clean and operate		
		Capacity 20L or better		
		Temperature range $RT+5$ °C to 99 °C or better		
		Temperature fluctuation ± 1.5 °C		
		Temperature homogeneity $\pm 1 ^{\circ}\text{C}$		
		Calibration certificate		
		Technical specs		
		Stainless steel tank and moisture proof design		
		Digital sweep generator for constant electronic waves		
	Ultrasonic bath sonicator	Anti-corrosion treatment with stainless steel interiors		
42.		-Temperature-controlled ultrasonic operation:		
	САТ-В	- Temperature setting: $80C^{\circ}$ or better.		
		- Tank max.(litre) = 03 or better		
	For DTL & FOOD LAB	- Ultrasound frequency $(kHz) = 40$		
		Calibration certificate		
		Supplied with a 40-60-micron porosity fritted glass support base, a 1 L		
	Solvent Filtration Assembly	graduated funnel, an anodized aluminum clamp and quick fit assembly		
	Solvent I nu unon Assembly	Prefilter size is 35 mm		
43.	CAT-A	Approximate filter area is 9.6 cm ²		
		Connection to 1-liter filtration flask (available as an accessory) is made		
	FOOD LAB	with a silicone stopper		
		Borosilicate glass conforming to USP Type I		

[Glass assembly should be au	toclave_able	
		2	p, oil free, vacuum adjustable gauge with	
		built in auto-thermal protection, along with 47mm membrane filter-		
		hydrophilic/hydrophobic.	on, along with 47 min memorane men	
			cron (100 per pack) with pH stability.	
		Calibration certificate	cron (100 per pack) with pri stability.	
		3 stacks of 6 dishes (90-100n	nm)	
		Patri Dish holder 3/25R		
	Anaerobic Jar	Capacity: 5liter or better		
	Anaci obic Sai	Time taken to attain anaerob	ic condition 3-5 mints	
44.	CAT-A	Stainless steel clamp	le condition 5-5 millts	
	CAI-A	Type: Pumping		
	FOOD LAB	Material lid: Polymethylmeth	hacrylate (\mathbf{PMMA}) or better	
	FOOD LAB	Calibration certificate	naci ylate (I wiwiA) or better	
		Microprocessor controlled.		
		Class B type		
		Capacity 40 liters or 1	more	
		 LCD screen can display temperature, pressure, time, operatin status, error and alarm information, etc Automatic functioning Vacumization, Heating, Sterilization 		
	Autoclave Vertical	• Automatic functioning Vacumization, Heating, Sterilizati- Exhaust and Drying		
	Autoclave vertical	Pre and post fractiona	ated vacuum	
45.	CAT-A	Sterilization temperat		
			or external demineralizer	
	FOOD LAB		15psi -17psi or better	
		Power: 220-240 VAC		
		Accessories:	<i>5,50</i> HZ	
		Trays 02 Nos		
		Basket 02 Nos		
		Calibration certificate		
			romotes visual monitoring and operational	
		accessibility.	tomotes visual monitoring and operational	
			g temperature and drying air temperature.	
		316 L stainless steel double walled internal structure.		
		Insulated anti-corrosive external structure.		
		One touch 6 preset cleaning procedures (washing, rinsing, ultrasou		
	Automated glassware washer		g temperature, drying temperature)	
		Automatic power off by tem		
	САТ-В		on absence of washing liquid and distilled	
46.		water	8 1	
	FOOD LAB	Capacity	100L or better	
		Water heating Temperature	99°C	
		Hot Air drying Temperature		
		Safety Protection		
		Water Presssure	0.03-0.8MPa or better	
		Ambient temperature	$5 ^{\circ}\text{C} \sim 40 ^{\circ}\text{C}$ or better	
		Relative humidity	< 85 %	
		Calibration certificate		
		Range seletable: 0-35,0-70,0-350,0-700mg/l BOD.		
47.	BOD with Incubator	Capacity: Six bottles 492ml		
		Resolution: 1mg/l		
		1	Page 91 of 146	

		Due sisions for a stored	and containing 150m all cost of alwages and autoria	
	CAT-A	Precision: for a standard containing 150mg/l each of glucose and gutmic		
		acid, testing 44 samples obtain a mean of 235 mg/l BOD with a 95%		
	FOOD LAB	confidance limit of ditribution of 11mg/l.		
		Drift: lesser than 3m	g/l BOD in 5 days	
		Operating temperatur	e 20°C	
		For Incubator		
		Digital display for pa	rameters viewing and control	
		Stainless steel shelve	-	
		Capacity	50 L or better	
		Temperature range	$0 ^{\circ}\text{C} \sim 40 ^{\circ}\text{C}$ or better	
		Temperature accurac		
		Calibration certificat		
		Capacity 20 L or		
		Controller Type, Dig		
		Includes, Stainless Steel Gable cover and Rubber Duck		
	Circulating water bath	Material Stainless Steel		
48.			for heater and circular pump	
70.	САТ-В		Ambient +5-100°C or better	
		Temperature Stability		
	FOOD LAB			
		Temperature Uniformity, ±0.05°C Calibration certificate		
		Image		
		Camera	CMOS color camera or better	
		Lens	M12 lens or better	
		Digital zoom	x 28 or better	
		Resolution	1 megapixel or better	
		Counting time	500 colonies per secondor better	
		Minimum size of col		
		Lighting technology	-	
		Lighting system	Automatic 6 combinations, top	
			and/or bottom light white or black	
	Digital Colony Counter		background	
49.	Digital Colony Counter	Counting		
ч <i>у</i> ,	CAT-A	Counting	Automatic, with manual control	
	CAT-A	Results / data	Recountable file, PDF report, JPEG,	
	FOOD LAB	PNG, BMP, Excel TM		
	TOOD LAD	USB connection	yes	
		Petri dishes	(55-90 mm)	
		PC requirements		
		Operating systems		
		Compatible with late	st system	
		Required Accessories		
		• Software, Connection cables, 3 control dishes, User's man		
		other required access	ories	
		Calibration certificat		
	Frost Free Double door (side	CFC-free rapid fan c		
50.			for temperature monitoring and alarms	
50.	by side) Refrigerator	Sprayed steel interior		
		sprayed steer interiors		

	CAT-B	Temperature range: $2 \ ^{\circ}C \sim 8 \ ^{\circ}C$	
		Interior cabinet LED lighting	
	FOOD LAB	Storage capacity500 L (each side) or better	
		Ambient temperature $05^{\circ}C \sim 40^{\circ}C$ or better	
		Temperature sensor NTC or better	
		Refrigerant R600a or better technology	
		Evaporator Copper tube aluminum fin	
		Condenser Tube type	
		Noise 55 Db or less	
		Transparent door haaving lock system	
		5 Or more shelf (on each side)	
		Disply LED/Digital display for temperature and warning/error	
		messages	
		To have seven days chart recorder/microprocessor controlled digital	
		data logger technology.	
		Calibration certificate	
		Adjustable volume pipettes Selected volume is clearly displayed in the large 4 digit volume display	
	Micropipettes	Selected volume is clearly displayed in the large 4-digit volume display	
F1		High accuracy and precision	
51.	САТ-В	Good chemical & UV-light resistance	
		Pipette ranges: 0.1-2ul, 0.5-10ul, 2-20ul, 10-100ul, 20-200ul,100-	
	FOOD LAB	1000ul, 500-5000ul along with tips.	
		Calibration certificate	
		External size (WxDxH) mm: 1040x800x2200 Or appropriate	
		Internal size (WxDxH) mm: 820x670x730 Or appropriate	
		Work Surface : SS 304	
		Work surface height: 850mm	
		Max. Opening: 500mm Or better	
		Air Velocity: 0.3~0.8 m/s	
		Noise: ≤60dB	
		Exhaust Duct: PVC, Standard length 4 m, Ø300mm	
		Fluorescent Lamp: 14W*1	
		UV Lamp: Emition of 253.7 nm	
		Front Window: 5mm toughened glass, motorized, height adjustable	
		Consumption: 400W	
	FUME HOOD	System Exhaust Volume: 710 m ³ /h or better	
50	CAT-B	Exterior Material: 1.0 mm cold-rolled steel with bacteria power	
52.		coating.	
	DRUG LAB	Interior Material: Compact material board with good acid and alkali	
		resistance function.	
		Standard Accessory:	
		UV lamp	
		Fluorescent lamp	
		Water tap	
		Gas tap	
		Water sink	
		Base cabinet	
		Total load of 2 waterproof sockets 500W	
		4 meter PVC exhausts duct	
		pipe strap. Active carbon filter	

		$C = 1$ $D \neq (250)$		
		• Gerber Butyrometers (350 x g)		
		• Solubility index in milk powder (164 x g)		
		• Extraction tubes Roese-Gottlieb/Mojonnier (80 x g) 1		
		variable speed range (200-1300 rpm).		
		Controller: Microprocessor Controller		
		Automatic Brake, imbalance switch off & Lid lock Control		
		Thermostatic temperature Control		
	Gerber Centrifuge	Display LCD		
		Accessories: i. 36 swinging sleeves of stainless steel with		
53.	САТ-В	special rotor		
	0 2	ii. Stainless steel holder including inserts, Butyrometer tubes		
	FOOD LAB	and tubes stand		
		iii. Rose - Gottlieb/Mojonnaire tube with holder, stainless		
		steel including inserts		
		and tubes stand		
		iv. All other necessary accessories (Gerber tubes with stand, mojonnaire		
		tubes with stand, Babcock tubes with stand) must be provided for proper functioning of equipment.		
		Vertical Electrophoresis Kit: Mini units set;		
		,		
		• Including base gel running unit, safely lid connecting leads		
		spacers etc.		
		• Gel casting unit including unit, glass plates, combs, casting		
		frame etc.		
		• Combs size includes 0.5mm, 0.75mm, 1.0mm, 1.5mm, 2mm		
		Number of wells 10/12/15		
	Gel Electrophoresis	Power Supply		
		• Power supply suitable for vertical (mini and standard) and		
54.	CAT-B	horizontal gel electrophoresis constant voltage and constant		
		current modes		
	FOOD LAB	• Output voltage: Adjustable from 0 to 500V or better with an		
		increment of 1 V or less		
		• Output Current; 800mA or better with increment of 1mA		
		• Terminals /Sockets;4 Pairs		
		 LCD/ LED Display 		
		 Safely; All necessary safely provisions like Over load; No load; 		
		Sudden change in load, power failure indication		
		Input Voltage; 220VAC.		
		mput voluge, 220 me.		
		Measuring ranges Refractive index scale (RI)		
		Range nD 1.3000to 1.6600 or better		
		Resolution nD ± 0.001 or better		
	Refractometer	Accuracy nD ± 0.001 or better		
	(Benchtop)	Measuring ranges Brix scale		
55.	(Benchtop)			
55.		e		
	CAT-A			
		Accuracy 0.05% or better		
	FOOD LAB	Operational Temperature: 0-40°C or better		
		Temperature probe accuracy ± 0.1 °C OR better		
		Measuring time5 seconds or better (per sample)		

		Default methods	Refractive Index, Brix, glucose, fructose,		
		invert sugar, sucrose.			
			ard oils and known brix solutions (Glucose,		
			Sugar) for equipment calibration. 5. In built		
			ve Index, Glucose, Fructose, Sucrose, and		
		Invert Sugar.			
		Calibration certificate			
		Viscosity test for food produ			
		Viscosity range	1 to 600000mPa.s		
	Viscometer TouchScreen	Speed Range [rpm]	0.01 to 250		
		Number of Speed	18 standard		
56.	CAT-A	Max. spring torque [mNm]			
		Accuracy	± 1.0 % full scale range		
	FOOD LAB	Repeatability	±0.2 %		
		Peltier temperature control	15 °C to 80 °C or better		
		Calibration certificate			
		—	olids Non-Fat, Total Solids, Milk density,		
		Protein, Water Content, Lac			
		Specific Adulterant Detection: Ammonium sulfate, Urea, Melamir			
		Nitrates (ammonium, potass	sium, sodium, etc.), Carbonates /		
		Bicarbonates (ammonium, p	ootassium, etc.), Added Water, Synthetic		
		Milk (Veg. Oil, Urea, Detergent, Water), Non-milk Fat, Sweeteners			
		(sucrose,maltodextrin), Non	-specific adulterants: In case the milk has		
		been contaminated withsubs	stantial volume of unknown adulterant the		
		instrument could detect it.			
		Optional modules for pH and	d conductivity measurements		
		Ranges:	-		
		Ammonium Sulfate	0.10		
		Accuracy	± 0.05 (abs.)		
		Urea	0.20		
		Accuracy	± 0.05 (abs.)		
	Milk Analyzer	Melamine	0.10		
		Accuracy	± 0.05 (abs.)		
57.	CAT-A	Nitrates (ammonium, potass	ium, sodium) 0.05		
		Accuracy ± 0.03 (abs.)			
	FOOD LAB	Carbonates/Bicarbonate (am	monium, potassium) 0.08		
		Accuracy ± 0.05	(abs.)		
		Added Water 20			
		Accuracy ± 5 (ab	os.)		
		Synthetic milk (veg. oil, urea	a, detergent, water) 20		
		Accuracy ± 5 (ab			
			0.5 (abs.)		
		Sweeteners (sucrose, maltod			
			on-specific adulterants) In case the milk		
			substantial volume of unknown adulterant		
		the instrument could detect i			
			: in the range of milk fat 1.5% to 9%		
		Parameters (Ultrasonic):			
		Fat	0.5% - 12%		
		Accuracy	$\pm 0.1\%$ (abs.)		
		Solids non Fat (SNF)	6% -12%		
I		Solids hold I dt (SIM)	Page 95 of 146		

S8. Portable NIR spectrometer CAT-A FoOD LAB FOOD LAB Output: Variety 1.0200 - 1.0400 g/cm3 Accuracy ± 0.000 g/cm3 (abs.) Protein 2% - 6% Accuracy ± 0.2% (abs.) Accuracy ± 0.100°C Accuracy ± 0.015°C (abs.) Added Water to Milk 0% - 60% Accuracy ± 0.015°C (abs.) Added Water to Milk 0% - 60% Accuracy ± 0.2% Calibration certificate. Country of Origin: USA, Japan, Western Europe, Bulgaria Application Analysis time > Detection of Adulterants • Detection of Adulterants • Detection of Adulterants • Detector Si (400 - 1100 nm), InGaAs (1100 - 2500 Optical bandwidth 8.75 nm Spectral resolution 0.5 nm Wavelength accuracy 0.20 nm Ambient temperature 5 - 40°C Sample temperature (min.) Ambient +10°C Sample temperature (min.) Moint +10°C Sample temperature (Ba	<u>г т</u>		T	
58. Portable NIR spectrometer CAT-A Feature Food LAB Cataracy Food LAB Cataracy Protein 2% - 6% Accuracy ± 0.29% (abs.) Freezing Point 0 - 1.000 °C Accuracy ± 0.015°C (abs.) Aded Water to Milk 0% - 60% Accuracy ± 5% (abs.) Lactose 0.5% - 7% Accuracy ± 0.2% Calibration certificate. Country of Origin: USA, Japan, Western Europe, Bulgaria Application • • Detection of Adulterants • Detection of Adulterants • Detection of Catarats Feature Specification Analysis time < 40 seconds Sample containers 4 and 8 mm disposable vials. 1, 2, 5 and 10 mm cuvettes and 1 mm flow cell Measurement mode Transmission Wavelength area 400 - 2500 nm Detector Si (400 - 1100 nm). InGaAs (1100 - 2500 mm) Detector Si (400 - 1100 nm). InGaAs (1100 - 2500 m) Detector Si (400 - 1100 nm). InGaAs (1100 - 2500 m) D			Accuracy	$\pm 0.2\%$ (abs.)
S8. Portable NIR spectrometer CAT-A Sample containers FOOD LAB Accuracy Valength accuracy 400 - 2500 nm Maked on the present of the present			3	•
8. Accuracy ± 0.2% (abs.) Freezing Point 0-1.000 °C Accuracy ± 0.015°C (abs.) Added Water to Milk 0% - 60% Accuracy ± 5% (abs.) Lactose 0.5% - 7% Accuracy ± 0.2% Calibration certificate. Country of Origin: USA, Japan, Western Europe, Bulgaria Application • Detection of Adulterants • Detector Si (400 - 1100 nm), InGaAs (1100 - 2500 nm Optical bandwidth 8.75 nm FOOD LAB FOOD LAB Accuracy 0.20 nm Adulteranter (min.) Ander temperature (min.) Sample temperature (min.) Ander temperature			-	e
58. CAT-A Sample containers 4 and 8 mm disposable vials. 1, 2, 5 and 10 mm cuvettes and 1 mm flow cell Measurement mode Transmission Vavelength area 400 - 2500 nm Pottable NIR spectrometer Specification CAT-A Spectral resolution Pottable NIR spectrometer Spectral resolution Vavelength area 400 - 2500 nm Ambient temperature 5 and 2 mm flow cell Main temperature 5 and 2 mm flow cell Vavelength area 400 - 2500 nm Detector 5 and 2 mm flow cell Main temperature 5 - 40°C Sample temperature (min.) Ambient +10°C Sample temperature (min.) Ambient +10°C Sample temperature (min.) 80°C Degree of protection IP54 Wavelength precision instrument (Based on a group of analysers) 0.015 nm as std Starture to instrument Causer of analysers) 0.015 nm as std				
S8. Accuracy ± 0.015°C (abs.) Added Water to Milk 0% - 60% Accuracy ± 5% (abs.) Lactose 0.5% - 7% Accuracy ± 0.2% Calibration certificate. Country of Origin: USA, Japan, Western Europe, Bulgaria Application • Detection of Adulterants • Detection of Adulterants • Detection of Adulterants • Detection of Adulterants • Detection of Isocants Feature Specification Analysis time < 40 seconds Sample containers 4 and 8 mm disposable vials. 1, 2, 5 and 10 mm cuvettes and 1 mm flow cell Measurement mode Transmission Wavelength area 400 - 2500 nm Detector Si (400 - 1100 nm), InGaAs (1100 - 2500 Optical bandwidth 8.75 nm Bector Si (400 - 1100 nm), InGaAs (1100 - 2500 Optical bandwidth 8.75 nm Gample temperature (min.) Ambient +10°C Sample temperature (min.) Ambient +10°C Sample temperature (max.) 80°C Degree of protection IP54 Wavelength precision instrunment-to- instrument (Based on a group of analysers) </th <th></th> <th></th> <th>-</th> <th></th>			-	
S8. Portable NIR spectrometer FOOD LAB Added Water to Milk 0% - 60% Accuracy ± 5% (abs.) Lactose 0.5% - 7% Accuracy ± 0.2% Calibration certificate. Country of Origin: USA, Japan, Western Europe, Bulgaria Application • Detection of Adulterants • Detection of Toxicants • Detection of Toxicants Feature Specification Analysis time < 40 seconds Sample containers 4 and 8 mm disposable vials. 1, 2, 5 and 10 mm cuvettes and 1 mm flow cell Measurement mode Transmission Wavelength area 400 - 2500 nm Detector Si (400 - 1100 nm), InGaAs (1100 - 2500 Optical bandwidth 8.75 nm Spectral resolution 0.5 nm Wavelength accuracy 0.20 nm Ambient temperature (min.) Ambient +10°C Sample temperature (max.) 80°C Degree of protection IP54 Wavelength precision instrument-40- instrument-40- instrument-40- instrument-40- a group of analysers) 0.015 nm as std Photometric nois			e	
58. Accuracy ± 5% (abs.) FOOD LAB Accuracy ± 0.2% Accuracy ± 0.2% Calibration certificate. Country of Origin: USA, Japan, Western Europe, Bulgaria Application • Detection of Adulterants • Detection of Adulterants • Detection of Toxicants Feature Specification Analysis time < 40 seconds Sample containers 4 and 8 mm disposable vials. 1, 2, 5 and 10 mm cuvettes and 1 mm flow cell Measurement mode Transmission Wavelength area 400 - 2500 nm Detector Si (400 - 1100 nm), InGaAs (1100 - 2500 Optical bandwidth 8.75 nm Bector Si (400 - 1100 nm), InGaAs (1100 - 2500 Optical bandwidth 8.75 nm Bector Si (400 - 1100 nm), InGaAs (1100 - 2500 Optical bandwidth 8.75 nm Sample temperature 5 - 40°C Sample temperature (min.) Ambient +10°C Sample temperature (min.) Ambient +10°C Sample temperature (min.) 80°C Degree of protection P54 Wavelength precision 0.015 nm as std			5	
S8. CaT-A FOOD LAB CAT-A FOOD LAB Spectral resolution Vavelength accuracy 5.40°C Sample temperature 0.5 mm Market and the second sec				
S8. Catibration certificate. Country of Origin: USA, Japan, Western Europe, Bulgaria Portable NIR spectrometer Sample containers CAT-A Spectral esolution FOOD LAB Spectral esolution Portable number of protection 0.5 nm Vavelength accuracy 0.20 nm Optical bandwidth 8.75 nm Secure Sample temperature (max.) 80°C Sample temperature (max.) 80°C Degree of protection Instrument-to-instrument-to-instrument (Based on a group of analysers) 0.015 nm as std Photometric noise 850 - 2500 nm < 20 micro au			•	
S8. Country of Origin: USA, Japan, Western Europe, Bulgaria Application Application S8. Portable NIR spectrometer FOOD LAB Specification FOOD LAB Specification Variable NIR spectrometer Measurement mode Transmission Wavelength area 400 - 2500 nm Detector Si (400 - 1100 nm), InGaAs (1100 - 2500 Optical bandwidth 8.75 nm Spectral resolution 0.5 nm Wavelength accuracy 0.20 nm Ambient temperature 5 - 40°C Sample temperature (min.) Ambient +10°C Sample temperature (min.) 80°C Degree of protection IP54 Wavelength precision instrument-to- instrument (Based on a group of analysers) 0.015 nm as std Photometric noise 850 - 2500 nm < 20 micro au			Accuracy	$\pm 0.2\%$
Application Application • Detection of Adulterants • Detection of Toxicants • Detection of Toxicants • Eeature Feature Specification Analysis time < 40 seconds Sample containers 4 and 8 mm disposable vials. 1, 2, 5 and 10 mm cuvettes and 1 mm flow cell Measurement mode Transmission Wavelength area 400 - 2500 nm Detector Si (400 - 1100 nm), InGaAs (1100 - 2500 Optical bandwidth 8.75 nm Spectral resolution 0.5 nm Wavelength accuracy 0.20 nm Ambient temperature 5 - 40°C Sample temperature (min.) Ambient +10°C Sample temperature (min.) 80°C Degree of protection IP54 Wavelength precision instrument to- instrument to- instrument dased on a group of analysers) 0.015 nm as std Photometric noise 850 - 2500 nm < 20 micro au				
 betection of Adulterants Detection of Toxicants Feature Specification Analysis time 400 seconds 3 ample containers 4 and 8 mm disposable vials. 1, 2, 5 and 10 mm cuvettes and 1 mm flow cell Measurement mode Transmission Wavelength area 400 - 2500 nm Detector Si (400 - 1100 nm), InGaAs (1100 - 2500 Optical bandwidth 8.75 nm Spectral resolution 0.5 nm Wavelength accuracy 0.20 nm Ambient temperature 5 - 40°C Sample temperature (max.) 80°C Degree of protection IP54 Wavelength precision instrument to- instrument (Based on a group of analysers) Photometric noise 850 - 2500 nm < 20 micro au 				an, Western Europe, Bulgaria
 Betection of Toxicants Feature Analysis time A0 seconds Analysis time Anote Anote Anote Andor 100 nm), InGaAs (1100 - 2500 Optical bandwidth B.75 nm Anote Andient temperature Anote Andient temperature (min.) Ambient +10°C Sample temperature (max.) Bo°C Degree of protection IP54 Wavelength precision instrument (Based on a group of analysers) Photometric noise 850 - 2500 nm < 20 micro au 				
58. CAT-A FOOD LAB Analysis time 58. CAT-A FOOD LAB Maise and the second se				
58. CAT-A FOOD LAB Sample containers 4 and 8 mm disposable vials. 1, 2, 5 and 10 mm cuvettes and 1 mm flow cell Measurement mode Transmission Wavelength area 400 - 2500 nm Detector Si (400 - 1100 nm), InGaAs (1100 - 2500 Optical bandwidth 8.75 nm Spectral resolution 0.5 nm Spectral resolution Mabient temperature 5 - 40°C Sample temperature (min.) Ambient +10°C Sample temperature (max.) 80°C Degree of protection IP54 Wavelength precision instrument-to-instrument (Based on a group of analysers) 0.015 nm as std Photometric noise 850 - 2500 nm < 20 micro au			Feature	Specification
58. Portable NIR spectrometer Neasurement mode Transmission 58. CAT-A Wavelength area 400 - 2500 nm 58. CAT-A Detector Si (400 - 1100 nm), InGaAs (1100 - 2500 Optical bandwidth 8. FOOD LAB Spectral resolution 0.5 nm Wavelength accuracy 0.20 nm Ambient temperature 5 - 40°C Sample temperature (min.) Ambient +10°C Sample temperature (min.) 80°C Degree of protection IP54 Wavelength precision instrument (Based on a group of analysers) 0.015 nm as std Photometric noise 850 - 2500 nm < 20 micro au			Analysis time	< 40 seconds
58. Measurement mode Transmission Portable NIR spectrometer Wavelength area 400 - 2500 nm Detector Si (400 - 1100 nm), InGaAs (1100 - 2500 Optical bandwidth 8.75 nm Spectral resolution 0.5 nm Wavelength accuracy 0.20 nm Measurement (min.) Ambient temperature Ambient temperature (min.) Ambient +10°C Sample temperature (max.) 80°C Degree of protection IP54 Wavelength precision instrument-to- instrument (Based on a group of analysers) 0.015 nm as std Photometric noise 850 - 2500 nm < 20 micro au			Sample containers	_
Portable NIR spectrometer Wavelength area 400 - 2500 nm S8. CAT-A Detector Si (400 - 1100 nm), InGaAs (1100 - 2500 m) FOOD LAB Spectral resolution 0.5 nm Wavelength accuracy 0.20 nm Ambient temperature 5 - 40°C Sample temperature (min.) Ambient +10°C Sample temperature (max.) 80°C Degree of protection IP54 Wavelength precision instrument-to-instrument (Based on a group of analysers) 0.015 nm as std Photometric noise 850 - 2500 nm < 20 micro au			Management	
Portable NIR spectrometer Detector Si (400 - 1100 nm), InGaAs (1100 - 2500 58. CAT-A Detector 0.5 nm FOOD LAB Spectral resolution 0.5 nm Mabient temperature 5 - 40°C Sample temperature (min.) Ambient +10°C Sample temperature (max.) 80°C Degree of protection IP54 Wavelength precision instrument-to-instrument (Based on a group of analysers) 0.015 nm as std Photometric noise 850 - 2500 nm < 20 micro au				
Portable NIR spectrometer Optical bandwidth 8.75 nm 58. CAT-A Spectral resolution 0.5 nm FOOD LAB Wavelength accuracy 0.20 nm Ambient temperature 5 - 40°C Sample temperature (min.) Ambient +10°C Sample temperature (max.) 80°C Degree of protection IP54 Wavelength precision instrument-to-instrument (Based on a group of analysers) 0.015 nm as std Photometric noise 850 - 2500 nm < 20 micro au			Wavelength area	400 - 2500 nm
58. CAT-A FOOD LAB Spectral resolution 0.20 nm Ambient temperature 5 - 40°C Sample temperature (min.) Ambient +10°C Sample temperature (max.) 80°C Degree of protection IP54 Wavelength precision instrument (Based on a group of analysers) 0.015 nm as std Photometric noise 850 - 2500 nm < 20 micro au		Doutable NID succture store	Detector	Si (400 - 1100 nm), InGaAs (1100 - 2500 n
58. FOOD LAB Wavelength accuracy 0.20 nm Ambient temperature 5 - 40°C Sample temperature (min.) Ambient +10°C Sample temperature (max.) 80°C Degree of protection IP54 Wavelength precision instrument-to-instrument (Based on a group of analysers) 0.015 nm as std Photometric noise 850 - 2500 nm < 20 micro au		Portable NIK spectrometer	Optical bandwidth	8.75 nm
FOOD LABWavelength accuracy0.20 nmAmbient temperature5 - 40°CSample temperature (min.)Ambient +10°CSample temperature (max.)80°CDegree of protectionIP54Wavelength precision instrument-to- instrument (Based on a group of analysers)0.015 nm as stdPhotometric noise850 - 2500 nm < 20 micro au	58.	CAT-A	Spectral resolution	0.5 nm
Ambient temperature5 - 40°CSample temperature (min.)Ambient +10°CSample temperature (max.)80°CDegree of protectionIP54Wavelength precision instrument-to- instrument (Based on a group of analysers)0.015 nm as stdPhotometric noise850 - 2500 nm < 20 micro au		FOOD LAB	Wavelength accuracy	0.20 nm
Sample temperature (max.)80°CDegree of protectionIP54Wavelength precision instrument-to- instrument (Based on a group of analysers)0.015 nm as stdPhotometric noise850 - 2500 nm < 20 micro au			Ambient temperature	5 - 40°C
Degree of protectionIP54Wavelength precision instrument-to- instrument (Based on a group of analysers)0.015 nm as stdPhotometric noise850 - 2500 nm < 20 micro au			Sample temperature (min.)	Ambient +10°C
Wavelength precision instrument-to- instrument (Based on a group of analysers)0.015 nm as stdPhotometric noise850 - 2500 nm < 20 micro au			Sample temperature (max.)	80°C
instrument-to- instrument (Based on a group of analysers)0.015 nm as stdPhotometric noise850 - 2500 nm < 20 micro au			Degree of protection	IP54
			instrument-to- instrument (Based on	0.015 nm as std
Calibration certificate			Photometric noise	850 - 2500 nm < 20 micro au
		L	Calibration certificate	
Materials/Samples for freeze drying: Food Products/Commodities.				
Pressure. Less than 10pascals		Exercise Device	1	
Freeze DryerFreeze Drying Time.20 hours or betterShelf temperature:At least -30 °C to +60 °C or better		Freeze Dryer	Freeze Drying Time.20 hours or better	
59. CAT-A Shell temperature: At least -50 °C to +60 °C or better Condenser capacity: At least 16 kg	59.	CAT-A	1	
Condenser temperature: At least -50°C		CAI-A		
FOOD LABAdjustable shelves with sample temperature sensors		FOOD LAB		
HCFC/CFC-free refrigeration system				

		Data may be exported y	via USB or Ethernet		
		Digital display			
			long with all accessories		
		Calibration certificates	6		
		ULT Freezer	verticle with dual freezing System		
		Cooling liquid	R404A / R508B or equivalent		
	ULT Freezer Chest	Cooling type	air cooling		
60.		Insulation	Vacuum insulation paneling		
00.	CAT-A	Capacity	350L or better		
		Temperature range	-50 °C to -86 °C or better		
	FOOD LAB	LN2/CO2 backup syste	em		
		Calibration certificate			
		Supplied with a 40-60-	micron porosity fritted glass support base, a 1		
		L graduated funnel, ananodized aluminum clamp and quick fit			
		assembly			
		Prefilter size is 35 mm			
		Approximate filter area is 9.6 cm ²			
		Connection to 1-liter filtration flask (available as an accessory) is made			
(1	Micro Filtration Assembly	with a silicone stopper			
61.		Borosilicate glass confe	orming to USP Type I		
	САТ-В	Glass assembly should be	autoclave-able		
			pump, oil free, vacuum adjustable gauge with		
	FOOD LAB	built in auto-thermal protection, along with 47mm membrane filter- hydrophilic/hydrophobic. Membrane Pore size 0.45micron (100 per pack) with pH stability. Calibration certificate			
			Potable tap water pretreated with Barnstead Pretreatment System		
		Silt density index (SDI)			
		Turbidity	<1 NTU		
		•	temperature +25°C) 1500 μ S/cm (670 Ω ·cm)		
		Hardness	Hardness stabilized		
		Chlorine	Max. 0.1 ppm		
		pH range	4 - 11		
		Temperature	$+2^{\circ}C - +35^{\circ}C$		
	Water (Water purify) Ultra-	Pressure	2 - 6 bar / 29 - 87 PSI (at a pressure >6 bar /		
	pure water	87			
62.	L	• •	PSI a pressure reducer must be installed		
	-		upstream of the system.		
	САТ-А		upstream of the system.		
	САТ-А	Product water quality	upstream of the system. y ASTM Type I (from dispensing valve)		
	-	Product water quality Conductivity (reference	upstream of the system. y ASTM Type I (from dispensing valve) temperature +25°C) μS/cm 0.055		
	САТ-А	Product water quality Conductivity (reference Resistance (reference te	upstream of the system. ASTM Type I (from dispensing valve) temperature +25°C) μ S/cm 0.055 mperature +25°C)M Ω ·cm 18.2		
	САТ-А	Product water quality Conductivity (reference Resistance (reference te TOC value	upstream of the system. ASTM Type I (from dispensing valve) temperature +25°C) μ S/cm 0.055 mperature +25°C)M Ω ·cm 18.2 ppb 1 - 5		
	САТ-А	Product water quality Conductivity (reference Resistance (reference te TOC value RNase	upstream of the system. ASTM Type I (from dispensing valve) temperature +25°C) μ S/cm 0.055 mperature +25°C)M Ω ·cm 18.2 ppb 1 - 5 ng/ml <0.003		
	САТ-А	Product water quality Conductivity (reference Resistance (reference te TOC value RNase DNase	upstream of the system. y ASTM Type I (from dispensing valve) temperature +25°C) μ S/cm 0.055 mperature +25°C)M Ω ·cm 18.2 ppb 1 - 5 ng/ml <0.003 pg/ul <0.4		
	САТ-А	Product water quality Conductivity (reference Resistance (reference te TOC value RNase DNase Bacteria	upstream of the system. ASTM Type I (from dispensing valve) temperature +25°C) μ S/cm 0.055 mperature +25°C)M $\Omega \cdot$ cm 18.2 ppb 1 - 5 ng/ml <0.003 pg/ul <0.4 CFU/ml <0.1		
	САТ-А	Product water quality Conductivity (reference Resistance (reference te TOC value RNase DNase Bacteria Bacterial endotoxins	upstream of the system. ASTM Type I (from dispensing valve) temperature +25°C) μ S/cm 0.055 mperature +25°C)M Ω ·cm 18.2 ppb 1 - 5 ng/ml <0.003 pg/ul <0.4 CFU/ml <0.1 EU/ml <0.001		
	САТ-А	Product water quality Conductivity (reference Resistance (reference te TOC value RNase DNase Bacteria Bacterial endotoxins Particle >0.2µm	upstream of the system. y ASTM Type I (from dispensing valve) temperature $+25^{\circ}$ C) μ S/cm 0.055 mperature $+25^{\circ}$ C)M $\Omega \cdot$ cm 18.2 ppb 1 - 5 ng/ml <0.003 pg/ul <0.4 CFU/ml <0.1 EU/ml <0.001 #/ml <1		
	САТ-А	Product water quality Conductivity (reference Resistance (reference te TOC value RNase DNase Bacteria Bacterial endotoxins Particle >0.2µm Dispense rate	upstream of the system. y ASTM Type I (from dispensing valve) temperature $+25^{\circ}C$) μ S/cm 0.055 mperature $+25^{\circ}C$)M $\Omega \cdot cm$ 18.2 ppb 1 - 5 ng/ml <0.003 pg/ul <0.4 CFU/ml <0.1 EU/ml <0.001 #/ml <1 L/min up to 1		
	САТ-А	Product water quality Conductivity (reference Resistance (reference te TOC value RNase DNase Bacteria Bacterial endotoxins Particle >0.2µm Dispense rate	upstream of the system. y ASTM Type I (from dispensing valve) temperature +25°C) μ S/cm 0.055 mperature +25°C)M Ω ·cm 18.2 ppb 1 - 5 ng/ml <0.003 pg/ul <0.4 CFU/ml <0.1 EU/ml <0.001 #/ml <1		

		$C_{\rm exp} = \frac{1}{2} $			
		Conductivity (reference temperature $+25^{\circ}$ C) μ S/cm 0.1 – 1.0			
		Resistance (reference temperature $+25^{\circ}$ C) M Ω ·cm 1 - 10			
		Retention rate for bacteria and particles 99%			
		External tank capacity 30L or 60L			
		flow* L/hr 16lph +/-15%			
		concentrate flow* L/hr 60			
		Calibration certificate			
		Digital camera Single-lens reflex (DSLR)			
		• Lens Mount :F- mount with AF coupling and AF contact			
		• Affective angle of view :Full frame FX format with			
		Astrophotography			
		• Image sensor : 35mm x 24 mm, CMOS			
		• File Format JPEG TIFF (RGB)			
		• Flash synchronizing speed 1/250s to 1/320s or better			
		• ISO sensitivity ISO 200 - 12800 (expandable to 100-51200) or			
		above			
	Still Camera	Built in flash Manual pop up with button release			
63.		• White balance Auto and manual			
	САТ-В	• Frame size (pixels): 1920 x 1080, 60p (Progressive) or better			
		 LCD / LED 8 cm or above Card slot : 1 CompactFlash card and 1 Secure Digital (SD) card, Either card can be used for primary or backup storage or for separate storage of NEF (RAW) and JPEG images; pictures can be copied between cards 			
	FOOD LAB				
		1			
		• Battery Two Nos. rechargeable battery with original Battery			
		Charger (compatible with this camera			
		• USB Cable, USB Cable Clip, HDMI Cable Clip(compatible			
		with camera)			
		Camera Strap, , Camera carrying bag professional Backpack Speed: 6000rpm or above.			
		Rotor capacity: $0.2mL/0.5mL/1.5mL/2mL \times 12$			
	CENTRIFUGE MACHINE	Rotor capacity. 0.2IIIL/0.5IIIL/2IIIL × 12 Run time: 30sec~99min/Continuous			
		Driving motor: Brushless DC motor			
64.	САТ-В	Safety Devices: + Door interlock, + Over-speed detection, + Over-			
		temperature detection, + Automatic internal diagnosis			
	DRUG LAB	Power Supply : 230V, 50/60Hz			
		Noise level: \leq 54dB or better			
		Used for Drying Glassware and instruments.			
		10° C above ambient + 100° C better			
		Working volume: 150 liters or better			
	Glassware Drying cabinet	Material: Stainless steel			
		No of shelves. Perforated, 02 or better (stainless steel)			
65.	САТ-В	Dual glass door.			
		Digital LED Display			
	For FOOD LAB	PID Digital Controller System			
		Sound/Visual Alarm			
		Calibration certificate			
<u> </u>	1				

r			
		Capacity :-	Capacity 125 Lit, OR above
		Temperature range: -	10° C above ambient + 100° C. OR above
			adjustable
	Glassware Drying cabinet		1 D: 100 G
			1 Pt 100 Sensor
66.	САТ-В	Time Adjustment:	Digital timer. (adjustable)
		Air Circulation: -	Forced air circulation (Fan). Forced air
	FOR DRUG LAB		circulation by quite air turbine,
		adjustable in	10% steps.
		Overheat protection:	Over Temperature Protection.
		Power :	220 Volts /50Hz
		Heavy Duty Acid resistant	gloves
		Beaker	
		Type 1 (Class A)	
		Borosilicate Glass	
		Must be Autoclavable	
		10 mL, 20 mL, 50 mL, 100	0 mL, 250 ml, 500 ml, 1000 mL
		Graduated cylinder	
		Type 1 (Class A)	
		Borosilicate Glass	
		Must be Autoclavable	
		10 ml, 25 ml, 50 ml, 100 m	nl, 250 ml, 500 ml
	Glassware (Beakers, Flasks,	Funnel	
	Cylinders, Pipettes, Gloves	Type 1 (Class A)	
	etc.)	Borosilicate Glass	
		Must be Autoclavable	
67.	САТ-В	50mm, 75mm, 90mm	
07.			
	FOOD LAB	Conical Flask	
		Type 1 (Class A)	
		Must be Autoclavable	
		25 mL, 50 mL, 100mL, 25	0mL, 500mL
		Volumetric flasks	
		Type 1 (Class A)	
		Must be Autoclavable	
		50 mL, 100mL, 250mL, 50	00mL, 1000 mL, 2000 mL
		Gooch Crucible	
		Porosity (40 to 60 µm)	
		Glass Graduated Pipette	
		Type 1 (Class A)	
		Must be Autoclavable	
		1 ml, 2 ml, 5ml, 10ml, 15m	ml, 20 ml, Dropper with Rubber Cap
		Micro Pipette	
			Page 99 of 146

<u>г </u>			<u> </u>				
			Type 1 (Class A)				
			Must be Autoclavable				
		0.2-2 uL, 1-10 u	0.2-2 uL, 1-10 uL, 2-20 uL , 20-100 uL				
		Burettes:	Burettes				
		Type 1 (Class A	. \				
		• -		mL, borosilicate gl	and (Cahallbach		
		stripes, PTFE sp	-	IIIL, UUIUSIIIcaic zi	ass (senendaen		
		Size: 10, 25, 50,					
		5126. 10, 25, 50,	, 100mL				
		Glass Petri Dish	1:				
		Type 1 (Class A	r)				
		Must be Autocla	avable				
		25mm, 50mm, 1	100mm, 150mm dia	ameter			
		Calibration part	:C'asta				
		Calibration certi Work plate.	ficate.	5 inches or large	ar .		
	STIRRER	Work plate mate	erial	Stainless Steel	/1		
		Voltage	Jilai.	220V-240			
68.	САТ-В	Speed Range		100-1000 rpm or	r better		
		Stirring Capacity	V	1 liter or better			
	DRUG LAB		With Magnets, & Speed display.				
		70A.					
		• Fiber gla	ass body with Vacu	um release values.			
		-	With Support Stand				
		 With 2 or more shelves with holes 					
			s Steel pan for desi				
			-	keted door with tem	nered safety		
		glass.	to hinged rung gass				
		Ũ	bly with Vacuum so	uirce			
		<u>70B.</u>	ly with vacuum 50	urce.			
	DESICCATOR		Polypropylene and	d Polycarbonate			
			licon-o-ring	11 Orycuroonate			
69.	САТ-В		rforated polyethyle	ne disc			
			es with USP testing				
	DRUG LAB	• compile	S WILL OST WSUNG				
		Plate	Inside	Flange	Overall		
		Diameter	Diameter	Outer	Height (mm)		
		(mm)	(mm)	Diameter	(±5%)		
		(±5%)	(±5%)	(mm)			
				(±5%)			
		150	145	170	210		
		200	195	230	270		
		250	240	275	330		
		300	297	338	410		

70.	70a. Computer with central work station CAT-B DRUG & FOOD LABs	 Branded Computer CPU: Branded CPU CPU Core i7 Processor: 3.4 GHz (13th generation) or better Bit Processing: 64 Bits Cache L1-L2: 8MB CD/DD/Super Drive Support Installed Processor Core i7 Hard Disk: 1 TB SSD Memory Ram Size and type: 16 GB DDR4 or better USB: 06 USB Ports or better Wi-Fi and Ethernet connectivity Monitor: Branded LED FHD 20 inch or more monitor Accessories: With all standard power cables. Key board, Mouse, VGA cables etc. Licensed Antivirus With genuine windows 10 or better 	
	70b. Printers CAT-B DRUG & FOOD LABs	Print granue water of the termination of te	
71.	HVAC CAT-B FOOD TESTING LABORATORY PESHAWAR	DX AHU for Microbiology 4-TR with 1600 CFM for maintaining Class CFor sterility Room it must be Class B and lobby/buffers should be C followed by D. 2-Nos of DX Hygienic AHUs will be required for captioned controlled area. 1- 8-TRs with 2800~3000-CFM 2- 8-TRs with 2800~3000-CFMDX AHU for Hitec Lab Area (48 x 15) 720-sft First FoorFor Hitec LAB DX AHU Cap: 6-TR with Air Vol. ranging between 1400~1500-CFM. AHU must be with 50% Fresh air and 50% Recovered airChemical Room 2 Area (23.10x15) 362-sft Second FloorFor Chemical Rooms DX AHU Cap: 10- TR with Air Vol. ranging between 2200~2500-CFM. AHU must be with 50% Fresh air and 50% Recovered air	

		Chemical Room 4 Area (23.10x15) 362-sft Second Floor	
		Food Chemical 2 Area (33.5 x 15) 502.5-sft	For Food Chemical Room DX AHU Cap: 4-TR with Air Vol. ranging between 1000~1200-CFM. AHU must be with 50% Fresh air and 50% Recovered air
		Temperature & Humidity Ranges	Humidity Range should be $35 \sim 45\% \pm 5\%$
		Ducting	Ducting 24-26.SWG. Flange joint duct should be acceptable for pressure maintaining. No S joint duct will be acceptable
		Room/Zone pressure failure alarm	Pressure Failure indication.
		Smoke detection	Smoke detectors will be provided in each room and corridors through exhaust system.
		Installation of Fire Sprinkler System	MS/SS Piping throughout the corridor and clean room areas and SS Piping in Micro Lab & Hitec Lab
		Certifications for Technical evaluation	For HVAC equipment AHRI or Eurovent Certification must be mandatory
		Phase-V Hayatabad Peshawar, I	all visit the Food testing Laboratory at before Pre-bid meeting and bid requirements / feasibility of the site for
	AOAC Official Method of Analysis (OMA)	Official Methods of Analysis (OMA) of AOAC INTERNATIONAL, 3- Volume Set, Twenty-Second Edition (22nd Edition 2023) George W. Latimer, Jr	
72.	CAT-C		
	FOOD LAB	Reference standards a	as per requirements of the official
		Monographs (USP,BP,I <u>Names of the Reference standard</u> • Acetaminophen • Acyclovir	EP,JP)
	Reference Standards	AlbuterolAlbendazoleAlendronate Sodium	
73.	CAT-C DRUG LAB	 Alendronate Sodium Alfuzosin Hydrochloride Allopurinol Alprazolam Dried Aluminum Hydroxid Amantadine Hydrochlorid Amikacin Sulfate Amitriptyline Hydrochlorid 	e
		Amlutiptyme Hydrochion Amlodipine Besylate	ut

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	Ammonium Chloride
	Amoxicillin
	Ampicillin Sodium
	Anhydrous Sodium Succinate
	• L-Arginine
	• Artemether
	• Artesunate
	• Ascorbic Acid (Vitamin C)
	• Aspirin
	• Atenolol
	Atorvastatin Calcium
	Atropine Sulfate
	Azithromycin
	Bacitracin Zinc
	• Baclofen
	Beclomethasone Dipropionate
	Benazepril Hydrochloride
	Benzalkonium Chloride
	• Betamethasone
	Betamethasone Dipropionate
	Bethanechol Chloride
	• Bisacodyl
	• Bromazepam
	Bromocriptine Mesylate
	Bupivacaine Hydrochloride
	Buspirone Hydrochloride
	• Caffeine
	Calcium Carbonate
	Calcium Gluconate Anhydrous
	Candesartan Cilexetil
	Captopril
	Carbamazepine
	Carbidopa
	• Carvedilol
	• Cefaclor
	Cefadroxil
	• Cefazolin
	Cefepime Hydrochloride
	Cefixime
	Cefotaxime Sodium
	Cefoperazone Dihydrate
	Cefpodoxime Proxetil
	Ceftazidime Pentahydrate
	Ceftriaxone Sodium
	Cefuroxime Sodium
	Cefuroxime Axetil
	Celecoxib
	• Cephalexin
	Cephradine
	Cetirizine Hydrochloride
	Chloramphenicol
	Chlordiazepoxide

Chlorhexidine
Chloroquine Phosphate
Cholecalciferol (Vitamin D3)
• Cimetidine
Ciprofloxacin
• Cisplatin
Citalopram Hydrobromide
Clarithromycin
Clavulanate Lithium
Clindamycin Hydrochloride
Clindamycin Phosphate
Clobetasol Propionate
Clomiphene Citrate
Clonazepam CIV
Clonidine Hydrochloride
Clopidogrel Bisulfate
Clotrimazole
Cloxacillin Sodium
Clozapine
Colchicine
Cyclophosphamide
Cycloserine
Cyclosporine
Desmopressin Acetate
• Desogestrel
Dexamethasone Sodium Phosphate
Dextromethorphan
Diclofenac Potassium
Diclofenac Sodium
• Dimenhydrinate
Diazepam CIV
Diltiazem Hydrochloride
Diphenhydramine Citrate
• Disulfiram
• Divalproex Sodium (200 mg)
Dobutamine Hydrochloride
Dopamine Hydrochloride
Doxazosin Mesylate
Doxycycline Hyclate
Doxylamine Succinate
Duloxetine Hydrochloride
• Dutasteride
• Enalapril Maleate
Enoxaparin Sodium
• Enrofloxacin
Entecavir Monohydrate
• Ephedrine Sulfate
• Epinephrine
• Erythromycin
Escitalopram Oxalate
Esomeprazole Magnesium
• Estradiol

Estradiol Valerate
Ethambutol Hydrochloride
Ethinyl Estradiol
• Ezetimibe
• Famciclovir
• Famotidine
• Fenofibrate
• Ferrous Sulfate
Fexofenadine Hydrochloride
• Fluconazole
Folic Acid
Formoterol Fumarate
Gatifloxacin
Gemcitabine Hydrochloride
Gemifloxacin Mesylate
• Glimepiride
Glucosamine Hydrochloride
• Haloperidol
Heparin Sodium
• L-Histidine
Hydralazine Hydrochloride
• Hydrocortisone
• Hydroquinone
Hyoscyamine Sulfate
• Ibuprofen
Imipenem Monohydrate
Imipramine Hydrochloride
• Indomethacin
Insulin Aspart
Insulin Glargine
Ipratropium Bromide
• Irbesartan
• Isoflurane
• Isotretinoin
• Itraconazole
Diluted Isosorbide Mononitrate
Ketoconazole
• Ketoprofen
Ketorolac Tromethamine
Labetalol Hydrochloride
Lansoprazole
• Leflunomide
Letrozole
Levetiracetam
• Levodopa
Levofloxacin
Lidocaine Hydrochloride
Linezolid
Lisinopril
Loperamide Hydrochloride
• Lorazepam
Loratadine

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•	Losartan Potassium
•	Lumefantrine
•	Magnesium Sulfate)
•	Mebendazole
•	Meclizine Hydrochloride
•	Mefenamic Acid
•	Meloxicam
•	Memantine Hydrochloride
•	Metformin Hydrochloride
•	Methotrexate
•	Methylcobalamin
•	Methyldopa
•	Metoclopramide Hydrochloride
•	Metoprolol Succinate
•	Metronidazole Benzoate
•	Miconazole
•	Midazolam Hydrochloride
•	Minoxidil
•	Misoprostol
•	Montelukast Sodium
•	Morphine Sulfate
•	Moxifloxacin Hydrochloride
•	Naloxone
•	Naproxen
•	Neomycin Sulfate
•	Nifedipine
•	Norfloxacin
•	Nystatin
•	Ofloxacin
•	Olanzapine
	Omeprazole
•	Ondansetron
•	Orphenadrine Citrate
•	Oxytocin
•	Oxytetracycline Hydrochloride
•	Pantoprazole Sodium
•	Paroxetine Hydrochloride
•	Penicillin G Benzathine
•	Pentazocine
•	Pheniramine Maleate
•	Phenytoin Sodium
•	Physostigmine Salicylate
•	Piperacillin
•	Piperazine
•	Piroxicam
•	Polymyxin B Sulfate
•	Prazosin Hydrochloride
•	Prednisolone Acetate
•	Pregabalin
•	Progesterone
•	Procyclidine Hydrochloride
	Promethazine Hydrochloride

	Propofol
	Pseudoephedrine Hydrochloride
	• Pyrazinamide
	Pyridoxine Hydrochloride
	Quetiapine Fumarate
	Quinine Sulfate
	Ramipril
	• Ribavirin (200 mg)
	• Rifampin (300 mg)
	• Risperidone
	Rivaroxaban
	Rosiglitazone Maleate
	Rosuvastatin Calcium
	Sertraline Hydrochloride
	• Sevoflurane
	Sildenafil Citrate
	Simethicone
	Sitagliptin Phosphate
	Solifenacin Succinate
	Spironolactone
	Streptomycin Sulfate
	• Sulfamethoxazole
	Tamoxifen Citrate
	• Tazobactam
	Tamsulosin Hydrochloride
	Tenofovir Disoproxil Fumarate
	Terbinafine Hydrochloride
	• Theophylline
	Ticlopidine Hydrochloride
	• Tinidazole
	Tobramycin
	• Tolbutamide
	• Topiramate
	Tramadol Hydrochloride
	Tranexamic Acid
	Triamcinolone (
	Trimethoprim (
	Valproic Acid
	• Valsartan
	Venlafaxine Hydrochloride
	Vinblastine Sulfate
	Warfarin
	Xylometazoline Hydrochloride
	Yohimbine Hydrochloride
	• Zinc Sulfate
	Zoledronic Acid
	• Zolmitriptan
LAL test Kit for endotoxin	Lysate for Endotoxin Testing
	 Multi test Vial for Endotoxin Testing
74. CAT-C	 Sensitivity: 0.03 EU/ml or better
	 Expiry: 70% or more.
FOR DRUG LAB	- Expiry. 7070 of more.

[• Contificate of Compliance and Contificate of Analysis with
		 Certificate of Compliance and Certificate of Analysis with online traceability is mandatory.
		onnie traceaonity is mandatory.
		Control Standard Endotoxin
		1. purified extract of E. coli
		2. Expiry: 70% or more
		3. Certificate of Compliance and Certificate of Analysis with
		online traceability with quoted lysate is must
		omine traceacinty with quoted fyshic is must
		LAL Reagent water,
		1. <0.001 EU/ml <1.56 pg/mL glucan
		2. Expiry: 70% or more
		3. Certificate of Compliance with online traceability is must
		1. Nutrient Agar (NA):
		2. Tryptic Soy Agar (TSA).
		3. Plate Count Agar
		4. MacConkey Agar:
		5. Eosin Methylene Blue (EMB) Agar
		6. Hektoen Enteric Agar (HEA):
		7. Mannitol Salt Agar (MSA):
		8. Xylose Lysine Deoxycholate (XLD)
		9. Buffered Peptone
		10. Selenite Cystine Broth:
		11. Tetrathionate Broth
		12. Lactose Broth13. Violet Red Bile Agar (VRBA):
		14. Listeria Enrichment Broth
		15. Cetrimide Agar
	Chemicals/Media	16. Sabouraud Dextrose Agar (SDA)
	(Analytical Grade)	17. Rappaport-Vassiliadis Soy Peptone (RVS) Broth
	(interpreter Grade)	18. Bacterial gram staining kit
75.	CAT-C	19. Nutrient broth
		20. SS media
	FOOD LAB	21. Hexane
		22. Diethyl Ether
		23. Anhydrous Sodium Sulfate (Na ₂ SO ₄)
		24. Ethanol or Isopropanol
		25. Sodium Metabisulfite (Na ₂ S ₂ O ₅)
		26. Sulfuric Acid (H ₂ SO ₄).
		27. Sodium Hydroxide (NaOH).
		28. Catalysts - mixture of potassium sulfate (K ₂ SO ₄) and copper(II)
		sulfate (CuSO ₄)
		29. Distillation Reagent, boric acid (H ₃ BO ₃)
		30. Indicator Solution - methyl red or bromocresol green-methyl
		red mixture
		31. Standard Acid Solution - Hydrochloric acid (HCl) OR sulfuric
		acid (H ₂ SO ₄)
		32. Standard Base Solution - Sodium hydroxide (NaOH)
		33. Benzoic Acid (C7H6O2)

	34. Lithium Citrate Buffers - Different pH levels (e.g., pH 2.2, 2.6,
	3.0) for ion-exchange chromatography.
	35. Sodium Citrate Buffers -
	36. Acetonitrile -
	37. Methanol
	38. Phenylisothiocyanate (PITC) - Used in pre-column
	derivatization (e.g., for PTC amino acid analysis).
	39. 6-Aminoquinolyl-N-hydroxysuccinimidyl Carbamate (AQC) -
	Used in derivatization for better detection.
2	40. O-Phthalaldehyde (OPA) - Commonly used with a thiol (like 2-
	mercaptoethanol) for fluorescence detection.
2	41. Ninhydrin - Used for post-column derivatization in ion-
	exchange chromatography, producing a colorimetric response.
	42. Hydrochloric Acid (HCl) - For hydrolysis of proteins/peptides.
	43. Sodium Hydroxide (NaOH) - For neutralization after
	hydrolysis.
2	44. Internal Standards - Known amino acids for calibration and
	quantification.
2	45. Ethanol - used for cleaning and maintenance of the system.
	46. Sodium Azide - added to buffers to prevent microbial growth.
	47. Formic Acid - used in mobile phases or for sample preparation.
	48. 6N HCl - For protein/peptide hydrolysis.
	49. Ammonium Hydroxide (NH4OH).
	50. Sulfuric Acid (H ₂ SO ₄) - Concentrated sulfuric acid (90-91%)
	51. Amyl Alcohol (Isoamyl Alcohol or Pentanol)
	52. Acrylamide/Bis-acrylamide
	53. Tris Base - Buffer component to maintain pH
	54. SDS (Sodium Dodecyl Sulfate)
	55. Ammonium Persulfate (APS)
	56. TEMED (N,N,N',N'-Tetramethylethylenediamine)
	57. β -Mercaptoethanol or DTT (Dithiothreitol)
	58. Glycerol
	59. Bromophenol Blue
	60. Protein Ladder/Marker
	61. Coomassie Brilliant Blue - Common protein stain
	62. Fixing Solution - Usually a mixture of methanol and acetic acid
	63. Destaining Solution - Typically a mixture of methanol, acetic
	acid, and water for Coomassie Brilliant Blue stain
e e e e e e e e e e e e e e e e e e e	64. Methanol - Used in some staining and destaining protocols
	65. Acetic Acid - Used in fixing and destaining protocols
	66. Concentrated Hydrochloric Acid (HCl) -
	67. Paraffin or Gelatin Capsules
	68. Acetone
	69. Potassium Permanganate (KMnO ₄)
	SodiumCarbonate(Na ₂ CO ₃)

SECTION V

QUALIFICATION AND EVALUATION CRITERIA

QUALIFICATION CRITERIA (MUST MEET CRITERIA)

For factors retained in the Bid Data Sheet pursuant to ITB 25, following quantification methods will be applied, submitted bids will be reviewed to determine compliance with Procuring Entity's mandatory requirements which serves the purpose to evaluate the responsiveness and eligibility of the bidder and equipment/ items proposed. Only bids found to be responsive and eligible will be further evaluated for technical criteria. The Bidder shall furnish documentary evidence to demonstrate that the bidder and Food Testing Equipment/ items it offers meet the following Qualification/ Eligibility requirement:

i. Mandatory Compliance Certificate:

21 CFR compliance, for all equipment/ items under Category-A (Where applicable).

ii. Verification:

The validity of the Bidder requires that all relevant forms be signed by authorized person or persons.

iii. Compliance to Agreement:

Accepting all the conditions set forth in these Bid Solicitation Documents by signing and stamping all the pages of the bidding document by the bidder each page of the SBD i.e. ITB, GCC, SCC, Bid Data Sheet, Addendums / Corrigendum (if any), Technical Requirements and other mandatory Form's provision etc.

iv. Authorization:

a) If **Bidder is not manufacturer:** but Authorized dealer of the original manufacturer in procuring entity's country offering the Goods on behalf of the Manufacturer under Manufacturer's Authorization Form (Section VII, Bidding Forms).

v. Registration of firm/company:

Registered as a legal entity authorized to enter into contracts for provision of services and goods. As a proof, the bidder should provide a certified copy of Certificate of Incorporation or other documents setting forth the legal basis of the company:

If **Bidder is Original Manufacturer:** is offering to supply Goods which the bidder manufactures or otherwise produces. The Bidder must submit documentary evidence that it is incorporated in the country of manufacture of the Goods and country of Procuring Entity

If bidder is authorized Agent of the original manufacturer in the procuring entity's country Proprietorship of a well-established Authorized Agent of the original manufacturer, including documentation regarding the company's legal status and registration under relevant law of Khyber Pakhtunkhwa or Government of Pakistan.

vi. Tax Registration:

Sales & Income Tax registration of the bidder is required as:

Valid Income Tax Registration

Valid General Sales Tax Registration

Bidder must be active taxpayer and listed as an active taxpayer on the respective websites of relevant taxation authorities.

As per **Rule No (37)(A)** of **KPPRA Rules 2014** For Service Level Agreement All bidders are required to be registered with the Khyber Pakhtunkhwa Revenue Authority (**KPRA**), established under the Khyber Pakhtunkhwa Finance Act, 2013 (Khyber Pakhtunkhwa Act No. XXI of 2013

vii. Bid Security:

Offers must include required Bid Security of 2% of the bid cost An Affidavit in this regard shall be included with technical proposal without mentioning the amount of bid security. Bid Security shall be submitted with the financial bid and from the account of the bidder / firm.

viii. Price/Bid Validity:

Offers must meet required Price Validity of 180 Days from Bid Opening date.

ix. An Affidavit on Judicial stamp paper of Rs.100 or more submitting following clauses that:
 a. Only genuine manufacturer's warranty for replacement and not repair of the complete Equipment and parts shall be done during the warranty period.

b. That the bidder / firm will provide all durables, consumables, re-agents etc for each equipment throughout the useful life & beyond useful life of each equipment.

c. That the firm is never blacklisted on any grounds whatsoever.

d. That the country of origin of equipment is mentioned clearly and correct along with Brand /Manufacturer's Name.

e. Standard Accessories as a part and parcel of the equipment are clearly mentioned and provided.

f. That the Bidder will provide after sales services beyond the period of warranty.

g. That bidder has submitted Bid Security amounting to 2% of the proposed bid inside financial proposal.

h. That the firm is never blacklisted on any grounds whatsoever by any of Provincial or Federal Government Department, Entity, Organization or autonomous body or Private Sector Organization anywhere in Pakistan.

i. That bidder has declared Conflict of Interest (if any), along with Bid Solicitation Documents.

j. That the country of origin of equipment / item is mentioned clearly and correct along with Brand / Manufacturer's Name.

k. That the Bidder will only provide Fresh, New and Genuine Goods / Items.

Technical bids of only those Bidders/ firms will qualify for Technical Evaluation which meets all of the above-mentioned criteria. Each Bid / proposal will be evaluated individually for each equipment/ item in order to achieve maximum value for money and economy for each equipment / item.

The Evaluation procedure will be conducted exclusively based on available information specified here in these Bid Solicitation Documents.

TECHNICAL EVALUATION METHODOLOGY (TOTAL SCORE = 70)

Technical Evaluation is based on Evaluation and comparison of Compliance & Conformity with requirements including but not limited to:

TECHNICAL EVALUATION CRITERIA (SCORE=70)

Quality:

a. Product Quality: Evaluation of quality will be based on proposed equipment registration for quality, standards / accreditation in the country of its origin with relevant international quality and standards certification body. i.e., if a product of USA has been proposed then (US-FDA), if a product of Japan has been proposed then (Japan Industrial Standards-JIS) & in case of Europe registration with (European Commission-EC) etc. Relevant standards certification bodies have been provided in Section-IV under each Equipment/ item.

b. Minimum one valid certificate shall be provided for Category A items.

- c. Certificate of US Food and Drug Administration (US-FDA), 510K of the quoted model.
- d. Certificate of European community medical devices directive (CEMDD/IVD98/79EC) (Full Quality Assurance or Product Quality Assurance) for the quoted model issued by IAF accredited body.
- e. Certificate of conformity, Declaration of Conformity, CE Technical documentation review, Compliance Report etc. will not be considered as CE certificate.
- f. Certificate of Ministry of health labor and welfare Japan (MHLW) of the quoted model/manufacturer. (Translated English Version)
- g. Non provision of one mandatory valid certificate shall lead to disqualification of the item.

Compliance/ Conformity with requirements: By comparing proposed equipment with the specifications of requirements to determine the degree to which the Goods, meet or exceed the Technical Specifications, specified by procuring entity in the **"Schedule of Requirements"**. A Bidder / firm or proposed Goods will "Meet" requirements when all Technical & Performance specification of offered Goods matches the requirements set by Procuring Entity herein these bid solicitation documents.

A Bidder / firm or proposed Goods will "Exceed" requirements when all Technical & Performance specification of offered Goods not only matches the requirements but also 50% of the Technical & Performance specification offered Goods are better than requirements specified herein these bid solicitation documents. e.g in case of "Accuracy of an equipment/ item required is ± 0.2 and the offered equipment/ item Accuracy ± 0.1 same will be considered exceeding requirement.

Product Performance and Productivity: Extent of Purpose, Performance, capacity, or functionality features meet or exceed the levels specified in the performance / functional requirements and/or influence the life-cycle cost. Performance, Capacity and Functionality features shall include "Accuracy, Precision, Reproducibility, and Repeatability.

Sample Evaluation:

Samples of equipment as decided by the executive committee, and quoted by bidder / firm for evaluation will be first verified for the Technical & Performance specifications proposed by the bidder. After satisfying itself for conformity of equipment / item with technical specification. During sample demonstration bidder will demonstrate Technical, Performance & functional characteristic of equipment/ item consisting of the determination of one or more characteristics of a given product, process or service according to a generally acceptable procedure. Bidder must demonstrate the Accuracy, Repeatability, Resolution & Precision etc. of each proposed equipment. In case where bidder may not be able to demonstrate sample of an equipment due to imported item not available in country, size of equipment, installation requirements in such case bidder must submit original manufacturer's catalogue, brochure, and data sheet of equipment.

Please Note: Samples provided by the bidders as per the requirements of executive committee for Technical Evaluation must meet the requirements and specifications set here in these Bid Solicitation Documents. Any sample not meeting the requirement will be rejected and equipment will be disqualified from the evaluation process. All Samples will be evaluated in comparison with specifications published here in these bid solicitation documents at Section-IV "Schedule of Requirements"

Company's / Bidders capacity and Capability:

To perform the contract. Capacity and Capability will be measured in terms of following:

a) Financial Capabilities:

Submission of signed / attested audit reports for the last consecutive three years along with financial statements for the past three fiscal years and shall meet the following basic financial criteria:

Annual Sales tax returns.

Bidder's/firms Experience:

List of same product deliveries/services provided over the last 3 years with details, dates and recipients (whether in the public or private domain). Certificate from user for satisfactory delivery shall be submitted.

The Certificate should NOT be older than 03 years.

c. Delivery Schedule:

Procuring Agency requires all the equipment to be delivered within Ninety (90) days from

the day of the award of the contract or issuance of Purchase Order.

d. Scope of Services:

Bidder's capability in terms of post award services which includes:

- a. Warranty: Standard manufacturer warranty is compulsory. However, the procuring entity will award score requires All such warranties for the goods shall remain in effect for a period as specified for each equipment and / or as specified in Technical Evaluation Criteria of one (1) year or for such other longer period that the original manufacture or authorized dealer of original manufacturer Bidder normally provides for such goods or a longer period agreed upon in this Contract after the goods are placed in use (the "Warranty Period")
- b. Technical Support & After Sales Services. Evidence and capability of firm/Bidders/ manufacturer for technical support & after sales service beyond warranty period. Evidence and capability of firm/Bidders/ manufacturer for technical support & after sales service during & beyond warranty period. After Sale Satisfactory performance certificate (verifiable) of the firm in last six years, on letter head, signed and stamped for the quoted model or previous provided model of equipment from the public sector Institutes/ Semi Government or Private Organizations of Pakistan. Performance certificate shall be coupled with supply order / purchase order from public sector Institutes/ Semi Government or Private organizations of Pakistan
- c. Established Office / Service Center: Distance office / service center complete with maintenance & 24/7 support facilities from the HQ of the procuring agency.
 Established Office / Service Center: Manufacturer's / principle approved workshop facility: Availability of Manufacturer's / Principle's approved workshop / service center facility within procuring entity's country i.e Pakistan.

Technical Evaluation of the bid has been allotted 70 marks / score to Category (A, B, C, D). Bids will be scored for total of 70 points

Technical Evaluation Weight	70%
Financial Evaluation Weight	30%
Total	100%

SCORING AND WEIGHING PRINCIPLES

Scores will be awarded to bidders / firm if proposed Goods will "Meet" requirements when all Technical & Performance specification of offered Goods matches the requirements set by Procuring Entity herein these bid solicitation documents without any minor deviation.

Scores will be awarded to bidders A Bidder / firm or proposed Goods will "Meet" requirements when all Technical & Performance specification of offered Goods matches the requirements set by Procuring Entity herein these bid solicitation documents without any minor deviation.

A Bidder / firm or proposed Goods will "Exceed" requirements when the offered equipment not only meets all the required specifications & functionality of equipment but also offers an additional feature / capability.

The Technical Evaluation Committee will evaluate and score bids in accordance with the quality of Technical Bid in terms of The Technical Evaluation Committee will evaluate and score bids in accordance with the quality of Technical Bid in terms of:

- Extent that bidder / firm Meets the criteria set for award of contract. i.e., the bidder/ firm has same capabilities as required here in the Bid Solicitation Documents.
- Extent that the bidder proposed specifications Meets or Exceeds the Specifications set herein these Bid Solicitation Documents for the same item.
- Extent that proposed equipment/ items exceeds the Performance & Productivity measures set under specifications of requirements.
- Extent that bidder proposed equipment / item exceeds the level of Capacity, or Functionality Features specified under specifications of requirements.
- Extent that samples provided meets or exceeds the Level of Specifications of requirements set in this SBD and Performance & Technical specifications provided / proposed by bidder / firm in its bid.

Financial Evaluation and Scoring System for Bids

(Maximum Allocable Marks Score = 30 marks)

The financial bids of technically qualified bidders will be opened publicly at the time to be announced by the Procuring Agency and the financial bids found technically non-responsive shall be returned un-opened to the respective Bidders.

Total Allocable marks for Technical Proposal = 70 Total Allocable marks in Financial Proposal= 30 Total Combined Allocable Score for individual bids =Marks obtained in Technical Evaluation + Marks obtained in Financial Evaluation = 100

Scoring Methodology:

Contract will be awarded to the best evaluated fair and responsive bidder whose product ranks highest in the Combined Evaluation scoring calculated through the Marks awarded to Technical Proposal and Financial Proposal as stated in the Bid Data Sheet of these Standard Bidding Documents.

The Evaluation Methodology is a combination of non-price factors (in Technical Criteria) and price factor (in Financial Criteria); and each having points as elaborated in the evaluation preforms provided in these SBDs.

Procedure for the Marks Scoring: Marks will be awarded or otherwise for various technical parameters to each quoted product based on the prescribed Technical and Financial criteria. The total combined marks will determine the highest-ranking product in each product category for contract award.

The formula to calculate the marks for the price by the bidders other than lowest bidder is given below:

Financial Evaluation Score of individual quoted Product = [Lowest quoted Price of the item ÷ Next higher proposed Price of the competing item] x Total allocable financial score

Solved Example of Financial Scoring :

If the lowest quoted price of an item is Rs. 86/-, the same lowest bidder will obtain score as below: = $[86 \div 86] \times 30$

=30 marks, being the lowest bidder for the quoted item.

- If the next higher quoted price of the same item is Rs. 105/-, the marks obtained will be: = $[86 \div 105] \times 30 = 24.57$ Marks

If the next higher quoted price of the same item is Rs. 130/-, the marks obtained will be: = $[86 \div 130] \times 30 = 19.84$ Marks And so on.

TECHNICAL EVALUATION CRITERIA FOR CATEGORY- A EQUIPMENT / ITEMS

S.No	Description of Variables	Allocated Points/Marks			
1.	Product / Manufacturer Evaluation Parameters				
2.	Conformance to Specification				
3.	Fully compliance with the required specifications as per Statement of Requirement. Minor deviations may be accommodated up to 3, subject to the condition that main function and performance in any aspect would not be affected. More than 3 minor deviations will be considered as major deviation and the bidder will be considered as non-responsive for the quoted item. (One mark for each deviation will be deducted).	25			
	One point will be awarded to additional required function up to a Maximum of two points.	2			
4.	Product International Certification				
5.	 Certificate of US Food and Drug Administration (US-FDA) CE certificate for the quoted product from European commission notified body and / or EU Declaration of Conformity JIS/ MHLW for the quoted product 	One certificate is mandatory having no marks, while producing additional certificates will get 2 marks each up to maximum of (04) points			
6.	Manufacturer Performance				
7.	Valid ISO 45001 Occupational Health & Safety Certificate of manufacturing plant from PNAC / IAF accredited body	2			
8.	RoHS certificate from notified body	2			
	Valid ISO 9001 Quality Management Certificate of manufacture from PNAC / IAF accredited body	2			
9.	After Sale Product Local Performance				
10.	One mark for each after sale satisfactory performance certificate (verifiable) of the firm / bidder in last five years on letter head, signed and stamped letter for the item from the public sector, Performance certificate shall be coupled with supply order / purchase order	6			

11.	One mark for each after sale satisfactory performance certificate (verifiable) of the firm / bidder in last five years on letter head for the item private sector. Performance certificate shall be coupled with supply order / purchase order from teaching level private sector.	5
12.	Warranty	
13.	Warranty Period of three years both with spare parts and services & Next two-year services only without spare parts from the date of Installation / Commissioning.	Mandatory
14.	Country of Origin: USA, Japan, Western Europe	Mandatory
15.	The bidder shall have to provide valid proof of being manufacturer / Authorized distributor of manufacturer.	Mandatory
16.	Product / Manufacturer Evaluation Parameters	
17.	Firm / bidder Evaluation	
18.	Personnel/Human Resource	
19.	Diploma of Associate Engineer (DAE) in electrical / electronic / instrumentation / mechatronics / mechanical / industrial. DAE certificate must be submitted. (1 mark for each certificate).	2
20.	Graduate Engineer with PEC Registration in electrical / electronics, instrumentation / mechatronics / mechanical / industrial. PEC registration card of the engineer must be submitted. (1 marks for each Engineer).	4
21.	Workshop facility Testing/ Calibration tools of Equipment	
22.	Availability of office in Peshawar, to be verified with Ownership / Rent Agreement with Owner/ Rent Agreement with Company Name.	1
23.	Availability of workshop in Peshawar, to be verified with Ownership / Rent Agreement with Owner/ Rent Agreement with Company Name.	2
24.	A certificate provided for the list of related tools available at workshop for the quoted items. Details shall be submitted with technical bid.	2
25.	A certificate along with List of Testing and Calibration tools for the quoted items available at workshop. Details shall be submitted with technical bid.	2
26.	Detail of Spare parts availability at workshop for the quoted items. Details shall be submitted with technical bid.	2
27.	Firm / bidder Financial Strength	

28.	 Last three years Audited Balance Sheet Duly attested by Chartered Accountant. Turnover 60 million or above 4 marks/points. Turnover below 60 and above 30 million will be awarded 3 marks/points. Turnover below 30 million and above 20 million will be awarded 1 marks/points. Income tax returns for last three years must be submitted with audited balance sheet 	4
29.	Firm / bidder Registration	
30.	Firm / bidder registration at relevant forum (SECP/Registrar of Firm / bidder, FBR).	Mandatory
31.	Valid ISO 9001 Quality Management Certificate of the firm / bidder from PNAC accredited bodies.	3
32.	Total Score of the Firm / bidder Evaluation Parameters	
33.	Total Score	70
and mod	The bidder shall provide the details regarding country of origin, Model, Make, manufacturer, along w the of supply, shipment, and any other associated details of the component items and that of the quo the equipment from quoted country of origin or authorized manufacturing site (GCC Clause 3).	

TECHNICAL EVALUATION CRITERIA FOR CATEGORY- B ITEMS

5. No.	Description of Variables	Allocated Points
1.	Product Evaluation Parameters	
2.	Conformance to the specification	
3.	Fully compliance with the required specifications as per Statement of Requirement. Minor deviations may be accommodated up to 4, subject to the condition that main function and performance in any aspect would not be affected. More than 4 minor deviations will be considered as major deviation and the bidder will be considered as non-responsive for the quoted item. (One mark for each minor deviation will be deducted).	25
4.	Manufacturer Performance	
5.	Valid ISO 9001 Quality Management Certificate of manufacturer from PNAC / IAF accredited body	3
6.	Certificate of US Food and Drug Administration (US-FDA)	6
	 CE certificate for the quoted product from European commission notified body and / or EU Declaration of Conformity 	
	JIS/ MHLW for the quoted product	
	Per certificate 2 marks (Maximum 6 marks)	
7.	Valid ISO 45001 Occupational Health & Safety Certificate of manufacturer from PNAC / IAF accredited body	2
8.	Valid ISO 14001 Environmental Certificate of manufacturer from PNAC / IAF accredited body	2
9.	RoHS certificate from notified body	2

10.	After Sale Past Performance	
11.	One mark for each satisfactory performance certificate (verifiable) of the firm / bidder on letter head or signed and stamped from the public sector for the quoted item work order, supported by Supply order/Purchase order.	6
1.	One mark for each satisfactory performance certificate (verifiable) of the firm / bidder on letter head of private sector for the quoted item work order supported by Supply order/Purchase order.	5
2.	Warranty	
3.	Warranty Period of three years both with spare parts and services & Next two-year services only without spare parts from the date of Installation / Commissioning.	Mandatory
4.	Firm / bidder registration at relevant forum (SECP/Registrar of Firm / bidder, FBR).	Mandatory
5.	Firm / bidder Evaluation Parameters	
6.	The bidder will have to give valid proof of being manufacturer / importer / authorized dealer	Mandatory
7.	The bidder must be registered with PEC category C5 or above Code EE11 (Applicable only for solar system)	Mandatory
8.	The bidder must be registered with PEC category C4 or above Code ME01 (Applicable only for HVAC system)	Mandatory
9.	Firm / bidder Financial Strength / Certificate	
10.	 Last three years Audited Balance Sheet Duly attested by Chartered Accountant. Turnover 60 million or above 5 marks/points. Turnover below 60 and above 30 million will be awarded 3 marks/points. Turnover below 30 million and above 20 million will be awarded 1 marks/points. 	5
	Income tax returns for last three years must be submitted with audited balance sheet	
11.	Valid ISO 9001 Quality Management Certificate of the firm / bidder from PNAC accredited body.	2

oma of Associate Engineer (DAE) in electrical / electronic / mechatronics or relevant field. E certificate must be submitted. (One mark for each certificate) duate Engineer with PEC Registration in electrical / electronics, / mechatronics / mechanical lustrial or equivalent. PEC registration card of the engineer must be submitted. (2 marks for h). ce / Workshop facility ilability of office in Peshawar, to be verified with Ownership / Rent Agreement with Owner/ t Agreement with Company Name.	3 6 2
lustrial or equivalent. PEC registration card of the engineer must be submitted. (2 marks for h). ce / Workshop facility ilability of office in Peshawar, to be verified with Ownership / Rent Agreement with Owner/	
ilability of office in Peshawar, to be verified with Ownership / Rent Agreement with Owner/	2
	2
eshawar will be awarded marks.	
ilability of workshop in Peshawar, to be verified with Ownership / Rent Agreement with ner/ Rent Agreement with Company Name.	1
al Score of the Firm / bidder Evaluation Parameters	
al Score	70
il n a	Iability of workshop in Peshawar, to be verified with Ownership / Rent Agreement with er/ Rent Agreement with Company Name. Il Score of the Firm / bidder Evaluation Parameters

TECHNICAL EVALUATION CRITERIA FOR CATEGORY- C ITEMS

6. No.	Description of Variables	Allocated Points
1.	Product Evaluation Parameters	
2.	Conformance to the specification subject to the clearance on Sample test	
	Total compliance with specification given in statement of Requirement subject to the clearance on sample test by the Inspection Committee. Excellent Sample	30
	Total compliance with specification given in statement of Requirement subject to the clearance on sample test by the Inspection Committee. Good Sample	20
	Total compliance with specification given in statement of Requirement subject to the clearance on sample test by the Inspection Committee. Satisfactory Sample	10
	Sample rejected by inspection committee or low-quality sample provided, the firm / bidder will be considered as non-responsive for the quoted item and no marks will be awarded.	0
3.	After Sale Past Performance	
	One mark for each after sale satisfactory performance certificate (verifiable) of the firm / bidder on letter head, signed and stamped from the public sector medical institution / hospital for the quoted item. Performance certificate shall be coupled with supply order / purchase order from public sector medical institution.	6
	One mark for each after sale satisfactory performance certificate (verifiable) of the firm / bidder on letter head for the quoted item from the private sector organization / medical institution of Pakistan. Performance certificate shall be coupled with supply order / purchase order from teaching level private sector medical institution.	6
4.	Valid ISO 45001, Certificate of manufacture from International Accreditation Forum (IAF) Accredited Bodies.	2
5.	Valid ISO 9001 Certificate of manufacture from International Accreditation Forum (IAF) Accredited Bodies.	2

6.	Valid ISO 14001 Environmental Certificate of manufacture from IAF accredited body.	2
7.	Certificate for the quoted product from European commission notified body and / or EU Declaration of Conformity / US FDA / MHRA UK/ Swiss medic / TGA / Japan MHLW / or relevant documentation from EP / USP / JP / BNF / BP (where applicable)	15
8.	The bidder will have to give valid proof of being manufacturer / importer / authorized dealer.	Mandatory
9.	Traceable Certificate of Authorization from manufacturer for each quoted brand for all Chemicals and for lab items where required in specs.	Mandatory
10.	Online Traceability of quoted items along complete specifications sheet either available on site or through email from manufacturer. Language of Certificate & specifications sheet must be English.	Mandatory
11.	Online Certificate of Analysis / Certificate of conformance must be available Or Certificate of analysis must be verified form Manufacturer through Official Email. Language of Certificate of Analysis / Certificate of conformance must be English.	Mandatory
12.	Firm / bidder Financial Strength / Certificate	
	Annual Sales tax returns for last three years	Mandatory
	Annual Income tax returns for last three years	Mandatory
13.	Last four years Audited Balance Sheet Duly attested by Chartered Accountant. (0. 5mark for each year).	2 marks
14.	Valid ISO 9001 Quality Management Certificate of the firm / bidder from PNAC accredited bodies.	2 marks
15.	Office / Workshop facility	
	Availability of office/workshop in Khyber Pakhtunkhwa to be verified with Ownership / Rent Agreement with Owner/ Rent Agreement with Company Name.	3
16.	Total Score of the Firm / bidder Evaluation Parameters	
	Total Score	70

NOTE: The bidder shall provide the details regarding country of origin, Model, Make, manufacturer, along with details of Manufacturing Units and mode of supply, shipment, and any other associated details of the component items and that of the quoted equipment. Bidders are bound to supply the equipment from quoted country of origin or authorized manufacturing site.

Bidder's Declaration

Yes	No	
		Requirements and Terms and Conditions: I/We have read and fully understand the IFB, including the IFB Information and Data, Schedule of Requirements, the General Conditions of Contract, and any Special Conditions of Contract. I/we confirm that the Bidder agrees to be bound by them.
		I/We confirm that the Bidder has the necessary capacity, capability, and necessary licenses to fully meet or exceed the Requirements and will be available to deliver throughout the relevant Contract period.
		Ethics : In submitting this Bid I/we warrant that the bidder: has not entered into any improper, illegal, collusive or anti-competitive arrangements with any Competitor, has not directly or indirectly approached any representative of the Procuring Entity to lobby or solicit information in relation to the IFB has not attempted to influence, or provide any form of personal inducement, reward or benefit to any representative of the Procuring Entity.
		I/We confirm to undertake not to engage in proscribed practices, or any other unethical practice, with the Procuring Entity or any other party, and to conduct business in a manner that averts any financial, operational, reputational or other undue risk to the Procuring Entity and I/we have confirm to abide by the code of conduct set by KPPRA Act 2012 and KPPRA Rules 2014 the and acknowledge that it provides the minimum standards expected of suppliers to the Procuring Entity.
		Conflict of interest: I/We warrant that the bidder has no actual, potential, or perceived Conflict of Interest in submitting this bid or entering a Contract to deliver the Requirements. Where a Conflict of Interest arises during the bidding process the bidder will report it immediately to the Procuring Entity in writing.
		Prohibitions, Sanctions: I/We hereby declare that our firm, its affiliates or subsidiaries or employees, including any JV/Consortium members or subcontractors or suppliers for any part of the contract is not under procurement prohibition by any Public Sector organization, such as debarred, black listed.
		Bankruptcy : I/We have not declared bankruptcy, are not involved in bankruptcy or receivership proceedings.
		Offer Validity Period: I/We confirm that this Quote, including the price, remains open for acceptance for the validity period specified in these BSD.
		I/We understand and recognize that Procuring Entity is not bound to accept any bid received, and we certify that the goods offered in our Quotation are new and unused.

		By signing this declaration, the signatory below represents, warrants and agrees that has been authorized by the Organization/s to make this declaration on its/their be	half.
Name			
In the c	capacity	y of	
Signed			
Officia	1 Stamp	p/ Seal	
Duly a	uthorize	ed to sign the Bid for and on behalf of	
Date			

TECHNICAL EVALUATION CRITERIA FOR MACHINERY & EQUIPMENT, INSTRUMENTS & OTHER HOSPITAL SUPPLIES, ETC FOR THE YEAR 2024-2025 (Maximum Allocable Marks Score = 70 marks)

Technical Evaluation Criteria for the Purchase of Category-A Equipment for FY 2024-

2025

Firm Name:_____

Bid Reference No:_____

The bidders will quote the technical bid quotation on the format / form given below.

Technical Bid Ouotation Form / Vis-à-vis Format for Category A&B

Name of Equipment / Item:			
Model:			
Make:			
Country of Origin:			
Category of equipment / item:			
S. No in SBDs:			
Comparative of Required Specification and Quoted Specification			
Required Specification	Quoted Specification of the bidder		
Project Director (DG DC & PS)			

Explanation of the quotation form:

- 1. All the bidders must submit the quotation for category A and B items on the above form.
- All the bidders must make a comprehensive sheet with all the required specifications.
 (Compare all the quoted specification to the required specification).
- 3. Attached the supported documents i.e Broacher / Catalogue clearly highlighted the specifications mention in the technical quotation.
- 4. The successful bidders shall provide complete technical manual and operation manual (soft and hard) to the end user.

BID FORM -1 BID COVER SHEET Mandatory General Information of Applicant Firm

<u>NOTE:</u> Complete filling of this form along with the provision of all requisite information is mandatory. Missing or not providing any of the requisite information may lead to disqualification of the bidder/s from the bidding competition without any correspondence. Any appeal from bidder/s, for whatsoever reasons, will not be entertained in such a case.

S.No	Name of the Bidding Firm:	
1.	 Please indicate whether the firm is: a. Manufacturer, or b. Importer, or c. Both Manufacturer and importer. d. Authorized Agent/Dealer/Distributor For various items Offered for this bidding competition. 	
2.	Please indicate the category/ies under which the Firm is applying for bidding a. Machinery & Equipment b. Instrument/ other laboratory supply. c. others	
3.	 Please provide names, attested copies of CNICs , two recent attested photographs , valid street addresses in Pakistan, all landline and mobile phone numbers of: Owner/Proprietor of the Firm. Managing Director / CEO of the Firm; Focal person officially 	
	made responsible and authorized by the Firm for day-to-day official Correspondence with	

	1	
	Project Director DG, DC & PS.	
	(Please provide clear, legible and visible attested photocopies of all the requisite items mentioned	
	items)	
4.	Please provide the following valid information:	
	 Regarding applicant Firm: Complete street address of the: a. Head Office b. Main warehouse; and c. Valid & working official Landline Phone and d. Fax Numbers; and e. Mobile phone numbers of the Focal Person registered against his /her CNIC No. And name; and f. Valid and functional 	
	Email address; g. Official Website	
	address/es	
	Please provide in original the bid security instrument along with the Financial Proposal in the sealed envelope in the form of valid Call Deposit Receipt / Bank Draft / Bank Guarantee of the requisite amount from a scheduled Bank of Pakistan in the name of Project Director Directorate General Drug control & Pharmacy Services, Peshawar. Non- provision of bid Security shall render the bid as non -responsive.	
	However, please provide an affidavit on judicial stamp paper of appropriate face value in the sealed Envelope of the technical proposal to the effect that the bid security of the required amount (without mentioning the amount of bid security) has been inside the	

	sealed envelope of the financial bid to the Project Director Directorate General Drug control & Pharmacy Services, Peshawar.	
6	Please provide attested copies of the following Tax related mandatory documents:	
	1. National Tax Number (NTN) of the Firm (FTN) for Income Tax.	
	2. Last year Income Tax Return of the Firm;	
	3. Sales Tax Registration Certificate of the Firm;	
	4. Certificate of Professional Tax	
7	In case of being manufacturer, the Firm should provide attested copies of the following mandatory documents also:	
	a. Duly attested copy of valid Certificate from Chamber of Commerce of the respective country	
8	In case of being importers, the Firm should provide attested copies of the following mandatory document/s also:	
	Valid Authorization Certificate for the quoted items, duly notarized from the country of origin or where the commercial office located for the quoted items. (NOTE: In case if the document is verifiable online then the notarization is not	
	mandatory)	

RETURNABLE CHECKLIST

Sno	Checklist	Yes/No	Page#
	(a) General enclosures (firmrelated)		
1.	Certificate of Company/ Firm registration / Incorporation under the laws of Pakistan.		
	Valid Sales Tax Registration certificate of KP-Revenue Authority.		
2.	Valid Income Tax certificate.		
2.	Audited Balance Sheet for minimum2 last 2 years and maximum 3 years.		
	Bank Statement for the Last minimum 2 years and maximum 3 years.		
3.	Acceptance of terms and conditions of tender documents duly signed and stamped.		
4.	Certificate of "Calibration" issued by Government of Pakistan mandated "Certification and Accreditation body" for "High Quality" & "Accuracy" of results of the equipment proposed.		
4.	Certificate as bidder is Manufacturer, Authorized Agent, or representative of the original manufacturer.		
	Company profile including:		
	Engineering		
	Managerial		
7.	Technical capabilities		
	Technical Staff List		
	Workshop, Service Center, Machinery, Factory, Ware House addresses.	`	

 $^{^2 \}textbf{Minimum:} The word ``Minimum'' has been used to indicate the most recent documents to be furnished by the bidder.$

^{``}Recent Years'' can be calculated by counting backwards from the day of the publication of the advertisement.

Sno	Checklist	Yes/No	Page#
	An affidavit on stamp paper of Rs. 50/- submitting following clauses: that		
	i) Only genuine manufacturer's warranty for replacement and not repair of equipment parts shall be done under the warranty.		
8	ii) That the firm/bidder is never blacklisted on any grounds whatsoever.		
0	 iii) That the country of origin of equipment is mentioned clearly and correct along with Brand / Manufacturer's Name. 		
	iv) Standard Accessories as a part and parcel of the equipment are clearly mentioned and provided.		
	 V) That the Bidder will provide after sales services beyond the period of warranty. 		
	hnical enclosures for each equipment / ITEM PROPOSE ate set of documents for each equipment as required part of bidding d	ocuments)	
	Specification offered for each equipment against floated specifications:		
	Model		
10.	Brand		
	Make		
	Country of Origin		
	Country Manufactured in. (if different from the origin)		
11.	Agency agreement / Authorization from manufacturer for sale and after sale services duly certified by concerned sanctioning authority.		
12.	Certificates regarding quality of production for conformity with internationally and locally accepted standards.		
13.	Certificates regarding Calibration of equipment assuring the accuracy of results of all the equipment. (Compulsory)		
14.	Clients and Customers list who have been provided same equipment. Or the most relevant equipment in last 3 years.		

15.	Literature / Broachers of product with technical data sheet.		
Sno	Checklist	Yes/No	Page#
16.	List of standard accessories of the equipment and software catalogues.		
17.	At least 3 Repair / After Sale Service Satisfactory Certificate from Semi Government / Government Departments.		
18.	Minimum Two to Three Contracts received in last One Year.		
19.	Minimum Two-Year same business history from the date of authorization.		
20	Bidder must indicate the country of manufacturer of product.		
	(C) FINANCIAL OFFER		
1.	Offered rate of items inclusive standard accessories (inclusive of sale tax, if applicable)		
2.	Separate prices for each item and part of the equipment shall be specified.		
3.	For all equipment requiring regular service & maintenance Service level agreement for One (01) year shall be submitted as a separate financial proposal in different envelope. (<i>Service Level Agreement for each Equipment item must be</i>		
	submitted as a separate financial proposal).		

THE GOVERNING RULES. The Bidding procedure shall be governed by the Khyber Pakhtunkhwa Public Procurement of Goods, Works and Services Rules, 2014

TECHNICAL BID FORM 1

Bidder's Ref No.

Letter of Intention

Name of the Contract: {_____} To: [_____] Dear Sir.

Having examined the bidding documents, including Addenda Nos. [insert numbers& Date of individual Addendum], the receipt of which is hereby acknowledged, we, the undersigned, offer to supply and deliver the Goods and ancillary services under the above-named Contract in full conformity with the said bidding documents and at the rates/unit prices described in the price schedule provided in Financial Bid or such other sums as may be determined in accordance with the terms and conditions of the Contract.

We undertake, if our Financial Bid is accepted, to deliver the Goods in accordance with the delivery schedule specified in the schedule of requirements.

If our Financial Bid is accepted, we undertake to provide a performance security/guaranty in the form, in the amounts, and within the times specified in the bidding documents.

We agree to abide by this bid, for the Bid Validity Period specified in the Bid Data Sheet and it shall remain binding upon us and may be accepted by you at any time before the expiration of that period.

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

We understand that you are not bound to accept the lowest or any Financial Bid you may receive. We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against f/raud and corruption in force in Pakistan.

We confirm that we comply with the eligibility requirements as per ITB clause 21.1 of the bidding documents and has duly provided earnest money @ 2% of the total bid value as per Khyber Pakhtunkhwa Public Procurement of Goods, Works and Services Rules-2014, in the shape of pay order / demand draft

/ call deposit bearing No. dated ______ in the name of Project Director Directorate

General Drug Control & Pharmacy Services with our Financial Bid.

Signed: In the capacity of Duly authorized to sign this bid for and on behalf of Bidder Name:. Signature

BID FORM 2

FINANCIAL BID FORM (PRICE SCHEDULE)

Name of the Firm:

Bidder's Ref. No:

Note: This form must cover all the costs associated to deliver the goods and services on such as, on Delivered Duty Paid (DDP) basis. The respective costs of each goods & services must be separately provided in the following manner.

	Description		Rate (Pak. Rs.) DDP Basis	
Item		Quantity	Unit Rate	Total
	TOTAL (DDP Price)) (in figures &words)		

Signature:
Designation:
Date:
Official Stamp:

PERFORMANCE SECURITY FORM

To:

WHEREAS [name of Supplier] (hereinafter called "the Supplier") has undertaken, in pursuance of Contract No. [Reference number of the contract] dated 20 to supply [description of goods and services] (hereinafter called "the Contract").

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

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

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

This guarantee is valid until the day of 20

Signature and seal of the Guarantors

[name of bank or financial institution]

[Address]

[date]

Manufacturer's Authorization Form

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

To:

WHEREAS [name of the Manufacturer] who are established and reputable manufacturers of [name and/or description of the goods] having factories at [address of factory]

do hereby authorize [name and address of Agent] to submit a bid, and subsequently negotiate and sign the Contract with you against IFB No. [reference of the Invitation to Bid] for the above goods manufactured by us.

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

[signature for and on behalf of Manufacturer]

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

INTEGRITY PACT

Declaration Of Fees, Commission and Brokerage Etc. Payable by the Su	ppliers of Goods, Services
& Works In Contracts Worth Rs. 10.00 million Or More	
Contract No	Dated

Contract Title:

[name of Supplier] hereby declares that it has not obtained or induced the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Khyber Pakhtunkhwa (Government of Khyber Pakhtunkhwa) or any administrative subdivision or Entity thereof or any other entity owned or controlled by Government of Khyber Pakhtunkhwa through any corrupt business practice.

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

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

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

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

Name of Buyer:	Name of Seller/Supplier:
Signature:[Seal]	Signature:[Seal]

RATE CONTRACT AGREEMENT

FOR PROCUREMENT OF EQUIPMENT / INSTRUMENTS/GLASSWARES /INFORMATION, COMMUNICATION & TECHNOLOGY (ICT) EQUIPMENT AND OTHERS FOR ESTABLISHMENT OF FOOD & DRUGS TESTING LABORATORY/IES PESHAWAR (for FY 2024-25)

This RATE CONTRACT AGREEMENT is made and agreed today on ______day of ______, 202_, between the Government of Khyber Pakhtunkhwa through Director General Drug Control & Pharmacy Services (Project Director of the Project Titled, ESTABLISHMENT OF PROVINCIAL FOOD AND DRUGS TESTING LABORATORIES PESHAWAR, FY-2024-25) (hereinafter referred to as the Procuring Agency or the first party, which expression shall, where the context admits, be deemed to include the assignee/s of the provincial Government of Khyber Pakhtunkhwa);

And

Messrs._____through Mr._____, Designation.____, CNIC No._____, (hereinafter referred to as the Supplier or the second party or he/his, which expression, unless repugnant to the context, means and includes their legal heir/s,

successors-in-interest, assignee/s and legal representative/s) that:

WHEREAS the Procuring Agency has made a bidding competition for selection and rate contracting for Procurement of equipment / instruments / glassware / information, communication & technology (ICT) equipment and others for establishment of Food & Drugs testing laboratory/ies Peshawar and the following items offered by the Second Party are approved being the best evaluated bids,

S.NO	Name Approved Item	Of	Model, Make & Country of Origin	Approved Unit Price (Inclusive of all Applicable Taxes)
1				
2				
3				
4				

The purchase of the selected and rate contracted goods is to be made by the Project Director i.e., The Director General Drug Control and Pharmacy Services either for Provincial Food or Drug Testing Laboratory/ies, Government of Khyber Pakhtunkhwa.

WHEREAS the Supplier declares that he is not a broker, middleman, but himself a Manufacturer and / or direct Importer and/or Authorized Agent of goods for which he has won the bidding competition for supply to the Procuring Agency; and

WHEREAS both the parties have agreed that the procuring entity shall purchase all or some or none of the goods, as of details given in this Contract Agreement, from the Supplier at the sole discretion of the procuring entity; and

WHEREAS the Supplier shall supply all the goods ordered by the procuring entity to the later in the quantity as mentioned in the supply order to be issued within the timeframe as mentioned in bidding Documents i.e., within Ninety (90) days (as mentioned in the advertised BSDs) from the date of issuance of supply order.

The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:

- (a) the Bid Form and the Price Schedule submitted by the Bidder;
- (b) the Schedule of Requirements;
- (c) the Technical Specifications;
- (d) the General Conditions of Contract;
- (e) the Special Conditions of Contract; and
- (f) the Procuring Entity's Notification of Award

Now, therefore, both the parties mutually agree to enter into this contract agreement as under:

- 1. The Supplier agrees to take full responsibility of the validity and implications, that may arise in future, of declaration submitted by him in the form of affidavit on judicial stamp paper along with their bids; and that in case of any kind of breach of the said declaration, the Supplier shall be liable to be proceeded against by the Procuring Agency in accordance with the clauses of this rate contract agreement as well as relevant laws, rules and regulations of the Government of Khyber Pakhtunkhwa, as amended from time to time, to govern such situation/s.
- 2. The supplies shall be made at the location specified in the supply order.
- 3. The Supplier shall be solely responsible for transportation, loading and / or unloading and staking of the supplied items till and at the time of delivery, to the destination indicated in Clause-2 above, including any damage or untoward incident, maintenance of required temperature and protection from light and other environmental conditions as well as other hazards that may possibly or potentially affect the supplied item in any way.
- 4. The Supplier shall NOT claim or charge transportation, loading / unloading, labor, or any other Charges related to or in the name of logistics, accidents, insurance, freight, etc.
- 5. The Supplier will make necessary arrangements for installation and training to the end user before release of final payment. The IQ, OQ and PQ shall be performed as per the laid down criteria in the BSDs.
- 6. The Supplier will provide Service Manual, Circuit diagram and error logbook and operational Manual for the supplied goods. The successful bidder shall provide complete technical manual and operation manual to the procuring entity.
- 7. In case of non-supply or delayed supply of items the Supplier shall be proceeded against under the relevant law of the land i.e., Procurement regime and associated laws of the country.
- 8. The Procuring Agency shall take legal / lawful action against the Supplier regarding non-supply, short supply, substituted supply, delayed supply or any other unlawful action / shortcoming, on the part of Supplier during the execution of this contract agreement. The Procuring Agency shall take lawful / legal action against the Supplier in accordance with the clauses of this contract agreement as Well as relevant laws, rules, and regulations of the Government of Khyber Pakhtunkhwa, as amended from time to time, to govern such situation/s, which may include, but not limited to, blacklisting, forfeiture of earnest money and performance guarantee, etc.
- 9. The Supplier agrees to the following conditions related to packing, packaging, and labeling of the goods to be supplied to Purchasing Agencies under this contract agreement:

10. The Procuring Agency shall have the right to inspect the storage facility, premises, warehouse, import documents etc. at any time till the execution of supply orders given under this contract agreement.

11. RATE VALIDITY:

The Supplier agrees that the approved price of all individual items quoted in the financial bids shall remain valid till and up to **30th June 2025**.

12. PERFORMANCE GUARANTEE:

Upon receipt of supply order from the Procuring Entity, the Supplier shall submit Performance Guarantee to the former, amounting to ten per cent (10%) of the total value of each individual supply order, which shall be returned to the Supplier upon request after the successful finalization of the process of procurement by the Procuring entity till the mandatory and/or offered warranty period whichever is later.

13. WARRANTY:

The supplier shall provide the warranty as prescribed in Bidding Documents under Special Conditions of Contract Clause 10 and GCC Clause 15.4, to the Procuring Entity for each individual item supplied in response to supply orders. After sale services shall also be provided by the bidder after the warranty period.

14. **PAYMENT SCHEDULE**:

Bill for payment in triplicate along with all other relevant andrequired documents shall be submitted by the Supplier, to the Procuring Agency immediately after completion of supply. The Supplier shall be bound to pay all applicable government taxes, duties, and stamp duties, imposed earlier or during the financial year by the Government of Pakistan or by the Provincial Government of Khyber Pakhtunkhwa on any supplied item.

15. FORCE MAJEURE:

- a. In case of the situation related to Force Majeure, the Supplier may inform the Procuring Agency in writing about the situation immediately without delay along with solid proof through the fastest, lawful, and available means of communication, but not through the electronic mail, and request the Procuring Agency for the grant of extension in the supply Period.
- b. The Procuring Agency, in case of being fully satisfied with the genuineness of situation arising from Force Majeure for the Supplier, may extend the period of supply of goods up to a maximum of not more than thirty days without penalty. However, the Procuring Agency and / or Purchasing Agency shall, in no case, be responsible or held responsible for any complications in making payments to Supplier by the Purchasing Agency that may arise from the closure of financial year and lapse / surrender of public funds vis-à-vis the normal financial management procedures in public sector.

16. PENALTIES:

a. The Supplier shall complete the supply of the ordered goods under this agreement within the stipulated period as laid down in the SBDs. In case of delay in supplies reaching to the procuring entity, except in situation/s covered under clause 17 above, the procuring entity may impose a penalty on the supplier which may lead to but is not limited to the forfeiture of performance guarantee.

17. INDEMNITY:

Notwithstanding any rights, duties and / or remedial measures and / or managerial actions taken and / or to be taken and / or any powers exercised and /or to be exercised by the Procuring Agency and / or Purchasing Agency and / or Purchasing Officer/s with regard to the execution of this contract agreement, the Supplier agrees to indemnify them for any loss or damage incurred or inflicted upon by them in individual or official capacity upon the Supplier whether through any of their actions and / or practices and /or otherwise. The Supplier further agrees to pay compensation to the Government of Khyber Pakhtunkhwa of an amount equivalent to ten times the sum of any commission, gratification, bribe or kickback and / or finder's fee given by the Supplier for the purpose of obtaining and /or inducing the Procurement of any contract, right, interest, privilege or other obligation/s or benefit In whatsoever form, from the Procuring Agency or any of the Purchasing Agencies.

18. RESOLUTION OF DISPUTES:

The Purchasing Agency and the Supplier shall make every effort to resolve amicably by direct negotiation any disagreement or dispute arising between them under or in connection with the contract / supplies. Despite such negotiation if the Purchasing Agency& Supplier have been unable to resolve amicably a contract dispute, either party may refer the case to Secretary Health Khyber Pakhtunkhwa for decision through a Dispute Resolution Committee under the chairmanship of Secretary Health Khyber Pakhtunkhwa with Director General Drug Control & Pharmacy Services, Khyber Pakhtunkhwa and Additional Secretary Health (Development) Khyber Pakhtunkhwa as members. The decision of the Dispute Resolution Committee shall be final and binding upon both the parties.

Signature	Signature:
Director Concerci Drive Control	Name:
Director General Drug Control	
and Pharmacy ServicesKhyber	Designation
Pakhtunkhwa	CNIC No.
	Stamp:
For and on behalf of Government of	For and on behalf of the successful bidder /
Khyber Pakhtunkhwa, Health	supplier (Party-2)
DepartmentPeshawar (Party-1)	
Signature.	Signature.
Name.	Name.
CNIC No.	CNIC No.
Director General, Khyber Pakhtunkhwa	Director Technical, Khyber Pakhtunkhwa
Food Safety & Halal Food Authority.	Food Safety & Halal Food Authority.

WITNESS NO. 1	WITNESS NO. 2	
Cionatura	Signatura	
Signature:	Signature:	
Name:	Name:	
Father's Name:	Father's Name:	
Address:	Address:	
CNIC No.	CNIC No.	