

Bidding Document

(After Pre-Bid Meeting)

(ITB No. 05/UoP/MP-IV/ARL)

Supply, Installation and Commissioning of Scientific/Lab Equipment at University of Peshawar

**UNDER THE HEC-FUNDED PROJECT TITLED
STRENGTHENING OF ACADEMIC AND
PROFESSIONAL FACILITIES AT UNIVERSITY OF
PESHAWAR**

Single Stage – Two Envelope Process

Pre-Bid Meeting and Site Survey:	September 4, 2018 at 10:00 AM
Last date for submission of Bid Documents	November 12, 2018 upto 11:00 AM
Opening of Technical Proposal	November 12, 2018 at 11:30 AM

PROJECT DIRECTOR

**STRENGTHENING OF ACADEMIC AND PROFESSIONAL
FACILITIES AT UNIVERSITY OF PESHAWAR
OFFICE AT FIRST FLOOR, QAUID-E-AZAM COLLEGE OF
COMMERCE, UNIVERSITY OF PESHAWAR**

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PART-ONE

SECTION-I: INSTRUCTIONS TO BIDDERS

1. Sources of Funds

- 1.1 The Procuring agency has received/applied for loan/grant/federal/provincial/local government funds from the source(s) indicated in the bid data sheet in various currencies towards the cost of the project /schemes specified in the bid data sheet 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

2. Eligible Bidders

- 2.1 This Invitation for Bids is open to all suppliers from eligible source as defined in the PP Rules, 2004 and are registered as Active Income Tax and Sales Tax payer with Federal Board of Revenue.
- 2.2 Bidders should not be associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Procuring agency to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods to be purchased under this Invitation for Bids.
- 2.3 Government-owned enterprises in the Province of 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 agency 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/autonomous/private organization. The bidder shall submit an affidavit to this effect.

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 agency named in the Bid Data Sheet, hereinafter referred to as "the Procuring agency," will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

5. Content of Bidding Documents

5.1 The bidding documents include:

- a) Instructions to Bidders (ITB)
- b) Bid Data Sheet
- c) General Conditions of Contract (GCC)
- d) Special Conditions of Contract (SCC)
- e) Schedule of Requirements
- f) Technical Specifications
- g) Bid Form
- h) Firm Level Eligibility and Qualification Requirements Form
- i) Product Level Mandatory Qualification Requirements Form
- j) Technical Specification Compliance Form
- k) Price Schedules
- l) Bid Security Form
- m) Contract Form
- n) Performance Security Form
- o) Bank Guarantee for Advance Payment Form
- p) Manufacturer's Authorization Form
- q) Integrity Pact

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

6. Clarification of Bidding Documents

6.1 An interested Bidder requiring any clarification of the bidding documents may notify the Procuring agency in writing. The Procuring agency will respond in writing to any request for Documents clarification of the bidding documents which it receives no later than three working days prior to the date of pre-bid meeting specified in the Bid Data Sheet. Written copies of the Procuring agency's response (including an explanation of the query but without identifying the source of inquiry) will be sent to all interested bidders who have attended the pre-bid meeting, and the same will also be uploaded on the Procuring agency's website.

7. Amendment of Bidding Documents

7.1 At any time prior to the deadline for submission of bids, the Procuring agency, for any reason, whether at its own initiative or in response to a clarification requested by 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 agency, at its discretion, may extend the deadline for the submission of bids.

8. Language of Bid

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

9. Documents Comprising the Bid

9.1 The bid prepared by the Bidder shall comprise the following components:

- a) a Bid Form and a Price Schedule completed in accordance with ITB Clauses 10, 11, and 12
- b) documentary evidence established in accordance with ITB Clause 13 that the Bidder is eligible to bid and is qualified to perform the contract if its bid is accepted;
- c) documentary evidence established in accordance with ITB Clause 14 that the goods and ancillary services to be supplied by the Bidder are eligible goods and services and conform to the bidding documents; and 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 carriage paid to University of Peshawar (CPT-UoP) prices. The price shall be inclusive of other (incidental) services, if any, listed in the Bid Data Sheet. No separate payment shall be made for incidental services listed in the Bid Data Sheet.

11.3 The terms CPT etc. shall be governed by the rules prescribed in the current edition of Incoterms published by the International Chamber of Commerce, Paris.

11.4 The Bidder's separation of price components in accordance with ITB Clause 11.2 above will be solely for the purpose of facilitating the comparison of bids by the Procuring agency and will not in any way limit the Procuring agency's right to contract on any of the terms offered.

11.5 Prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation on any account, unless otherwise specified in the Bid Data Sheet. A bid submitted with an adjustable price quotation will be treated as nonresponsive and will be rejected, pursuant to ITB Clause 25. If, however, in accordance with the Bid Data Sheet, prices

quoted by the Bidder shall be subject to adjustment during the performance of the contract, a bid submitted with a fixed price quotation will not be rejected, but the price adjustment would be treated as zero.

12. Bid Currencies

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

13. Documents Establishing Bidder's Eligibility and Qualification

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

13.2 The documentary evidence of the Bidder's eligibility to bid shall establish to the Procuring agency's satisfaction that the Bidder, at the time of submission of its bid, is from an eligible country as defined under ITB Clause 3.

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

- a) that, in the case of a Bidder offering to supply goods under the contract which the Bidder did not manufacture or otherwise produce, the Bidder has been duly authorized by the goods' Manufacturer or producer to supply the goods in the Procuring agency's country;
- b) that the Bidder has the financial, technical, and production capability necessary to perform the contract;
- c) that, in the case of a Bidder not doing business within the Procuring agency's country, the Bidder is or will be (if awarded the contract) represented by an Agent in that country equipped, and able to carry out the Supplier's maintenance, repair, and spare parts-stocking obligations prescribed in the Conditions of Contract and/or Technical Specifications; and
- d) that the Bidder meets the qualification criteria listed in the Bid Data Sheet.

14. Documents Establishing Goods Eligibility and Conformity to Bidding Documents

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

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

14.3 The documentary evidence of conformity of the goods and services to the bidding documents may be in the form of literature, drawings, and data, and shall consist of:

- a) a detailed description of the essential technical and performance characteristics of the goods;
- b) a list giving full particulars, including available sources and current prices of spare parts, special tools, etc., necessary for the proper and continuing functioning of the goods for a period to be specified in the Bid Data Sheet, following commencement of the use of the goods by the Procuring agency; and

- c) an item-by-item commentary on the Procuring agency's Technical Specifications demonstrating substantial responsiveness of the goods and services to those specifications, or a statement of deviations and exceptions to the provisions of the Technical Specifications, in the form specified in the Bid Data Sheet.
- 14.4 A bid which fails to submit the documentary evidence of eligibility and conformity of the goods and services to the bidding documents shall be rejected by the Procuring agency as nonresponsive.
- 14.5 For purposes of the commentary to be furnished pursuant to ITB Clause 14.3(c) above, the Bidder shall note that standards for workmanship, material, and equipment, as well as references to brand names or catalogue numbers designated by the Procuring agency in its Technical Specifications, are intended to be descriptive only and not restrictive. The Bidder may substitute alternative standards, brand names, and/or catalogue numbers in its bid, provided that it demonstrates to the Procuring agency's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.
- 15. Bid Security**
- 15.1 Pursuant to ITB Clause 9, the Bidder shall furnish, as part of its bid, a bid security in the amount specified in the Bid Data Sheet. The bid security shall be submitted from the account of the firm/bidder/Supplier who submits the bid.
- 15.2 The bid security is required to protect the Procuring agency against the risk of Bidder's conduct which would warrant the security's forfeiture, pursuant to ITB Clause 15.7.
- 15.3 The bid security shall be in Pak. Rupees and shall be in one of the following forms:
- a) a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the Procuring agency's country, in the form provided in the bidding documents or another form acceptable to the Procuring agency and valid for thirty (30) days beyond the validity of the bid; or
 - b) irrevocable encashable on-demand Bank call-deposit
- 15.4 Any bid not secured in accordance with ITB Clauses 15.1 and 15.3 will be rejected by the Procuring agency as nonresponsive, pursuant to ITB Clause 25.
- 15.5 Unsuccessful bidders' bid security will be discharged or returned as promptly as possible but not later than thirty (30) days after the expiration of the period of bid validity prescribed by the Procuring agency pursuant to ITB Clause 16.
- 15.6 The successful Bidder's bid security will be discharged upon the Bidder signing the contract, pursuant to ITB Clause 33, and furnishing the performance security, pursuant to ITB Clause 34.
- 15.7 The bid security may be forfeited:
- a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Bid Form; or
 - b) in the case of a successful Bidder, if the Bidder fails:
 - i. to sign the contract in accordance with ITB Clause 33; or
 - ii. to furnish performance security in accordance with ITB Clause 34

16. Period of Validity of Bids

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

17. Format and Signing of Bid

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

18. Sealing and Marking of Bids

- 18.1 The original and each copy of the bid shall comprise 'TECHNICAL PROPOSAL' and 'FINANCIAL PROPOSAL'. The envelopes shall be marked as "TECHNICAL PROPOSAL" and "FINANCIAL PROPOSAL" in bold and legible letters to avoid confusion. The envelopes shall then be sealed in outer envelopes, duly marking the envelopes as "ORIGINAL" and "COPY." The envelopes shall then be sealed in an outer most single envelope.
- 18.2 The inner and outer envelopes shall:
- a) be addressed to the Procuring agency at the address given in the Bid Data Sheet; and
 - b) bear the Project name indicated in the Bid Data Sheet, the Invitation for Bids (IFB) title and number indicated in the Bid Data Sheet, and a statement: "DO NOT OPEN BEFORE," to be completed with the time and the date specified in the Bid Data Sheet, pursuant to ITB Clause 2.2
- 18.3 The inner envelopes shall also indicate the name and address of the Bidder to enable the bid to be returned unopened in case it is declared "late".
- 18.4 If the outer envelope is not sealed and marked as required by ITB Clause 18.2, the Procuring agency will assume no responsibility for the bid's misplacement or premature opening.

19. Deadline for Submission of Bids

- 19.1 Bids must be received by the Procuring agency at the address specified under ITB Clause 18.2 no later than the time and date specified in the Bid Data Sheet.
- 19.2 The Procuring agency may, at its discretion, extend this deadline for the submission of bids by amending the bidding documents in accordance with ITB Clause 7, in which case all rights and obligations of the Procuring agency and bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

20. Late Bids

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

21. Modification and Withdrawal of Bids

- 21.1 The Bidder may modify or withdraw its bid after the bid's submission, provided that written notice of the modification, including substitution or withdrawal of the bids, is received by the Procuring agency prior to the deadline prescribed for submission of bids.
- 21.2 The Bidder's modification or withdrawal notice shall be prepared, sealed, marked, and dispatched in accordance with the provisions of ITB Clause 18. by a signed confirmation copy, postmarked not later than the deadline for submission of bids.
- 21.3 No bid may be modified after the deadline for submission of bids.
- 21.4 No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Bid Form. Withdrawal of a bid during this interval may result in the Bidder's forfeiture of its bid security, pursuant to the ITB Clause 15.7.

22. Bidding Procedure

- 22.1 Single Stage - Two Envelope Bidding Procedure shall be followed. The said procedure is reproduced as follows:
 - a) The bid shall comprise a single package containing two separate envelopes. Each envelope shall contain separately the financial proposal and the technical proposal;
 - b) the envelopes shall be marked as "FINANCIAL PROPOSAL" and "TECHNICAL PROPOSAL" in bold and legible letters to avoid confusion;
 - c) initially, only the envelope marked "TECHNICAL PROPOSAL" shall be opened;
 - d) the envelope marked as "FINANCIAL PROPOSAL" shall be retained in the custody of the procuring agency without being opened;
 - e) the procuring agency shall evaluate the technical proposal in a manner prescribed in advance, without reference to the price and reject any proposal which does not conform to the requirements of ITB 13 and 14;
 - f) during the technical evaluation no amendments in the technical proposal shall be permitted;

- g) the financial proposals of bids shall be opened publicly at a time, date and venue announced and communicated to the bidders in advance;
 - h) after the evaluation and approval of the technical proposal the procuring agency, shall at a time within the bid validity period, publicly open the financial proposals of the technically accepted bids only. The financial proposal of bids found technically nonresponsive shall be returned un-opened to the respective bidders; and
 - i) the bid found to be the lowest evaluated bid shall be accepted.
- 22.2 The “TECHNICAL PROPOSAL” and “FINANCIAL PROPOSAL” shall comprise documents specified in the Bid Data Sheet.

23. Opening of Bids by Procuring Agency

- 23.1 The Procuring agency will open all bids in the presence of bidders’ representatives who choose to attend, at the time, on the date, and at the place specified in the Bid Data Sheet. The bidders’ representatives who are present shall sign a register evidencing their attendance.
- 23.2 The bidders’ names, bid modifications or withdrawals, bid prices, discounts, and the presence or absence of requisite bid security and such other details as the Procuring agency, at its discretion, may consider appropriate, will be announced at the opening. No bid shall be rejected at bid opening, except for late bids, which shall be returned unopened to the Bidder pursuant to ITB Clause 20.
- 23.3 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.
- 23.4 The Procuring agency will prepare minutes of the bid opening.

24. Clarification of Bids

- 24.1 During evaluation of the bids, the Procuring agency 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.

25. Preliminary Examination

- 25.1 The Procuring agency will examine the bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order.
- 25.2 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected. If the Supplier does not accept the correction of the errors, its bid will be rejected, and its bid security may be forfeited. If there is a discrepancy between words and figures, the amount in words will prevail.

- 25.3 The Procuring agency may waive any minor informality, nonconformity, or irregularity in a bid which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any Bidder.
- 25.4 Prior to the detailed evaluation pursuant to ITB Clause 26, the Procuring agency will determine the substantial responsiveness of each bid to the bidding documents. For purposes of these Clauses, a substantially responsive bid is one which conforms to all the terms and conditions of the bidding documents without material deviations. Deviations from, or objections or reservations to critical provisions, such as those concerning Bid Security (ITB Clause 15), Applicable Law (GCC Clause 30), and Taxes and Duties (GCC Clause 32), will be deemed to be a material deviation. The Procuring agency's determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.
- 25.5 If a bid is not substantially responsive, it will be rejected by the Procuring agency and may not subsequently be made responsive by the Bidder by correction of the nonconformity.

26. Evaluation and Comparison of Bids

- 26.1 The Procuring agency will evaluate and compare the bids which have been determined to be substantially responsive, pursuant to ITB Clause 25.
- 26.2 The bids will be compared on the basis specified in the Bid Data Sheet.
- 26.3 For the purposes of comparison of bids quoted in different currencies, the price shall be converted into a single currency specified in the Bid Data Sheet. The rate of exchange shall be the selling rate, prevailing on the date of opening of bids specified in the Bid Data Sheet, as notified by the State Bank of Pakistan on that day.
- 26.4 The Procuring agency's evaluation of a bid will be on carriage paid to (CPT) price and will exclude any allowance for price adjustment during the period of execution of the contract, if provided in the bid.
- 26.5 The Procuring agency's evaluation of a bid will take into account, in addition to the bid price quoted in accordance with ITB Clause 11.2, one or more of the following factors as specified in the Bid Data Sheet, and quantified in ITB Clause 26.6:
- 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 in the Procuring agency's country for the equipment offered in the bid;
 - 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
 - h) in the Technical Specifications

26.6 For factors retained in the Bid Data Sheet pursuant to ITB 26.5, one or more of the following quantification methods will be applied, as detailed in the Bid Data Sheet:

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

b) Delivery schedule.

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

or

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

or

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

c) Deviation in payment schedule:

i. Bidders shall state their bid price for the payment schedule outlined in the SCC. Bids will be evaluated on the basis of this base price. Bidders are, however, permitted to state an alternative payment schedule and indicate the reduction in bid price they wish to offer for such alternative payment schedule. The Procuring agency may consider the alternative payment schedule offered by the selected Bidder.

or

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

d) Cost of spare parts.

i. The list of items and quantities of major assemblies, components, and selected spare parts, likely to be required during the initial period of operation specified in the Bid

Data Sheet, is annexed to the Technical Specifications. The total cost of these items, at the unit prices quoted in each bid, will be added to the bid price.

or

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

or

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

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

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

- f) Operating and maintenance costs.

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

- g) Performance and productivity of the equipment.

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

or

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

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

Alternative

26.7 Merit Point System

The following merit point system for weighing evaluation factors can be applied if none of the evaluation methods listed in 26.4 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 Merit Point System:

a) Evaluated price of the goods:	60 to 90
b) Cost of common list spare parts	0 to 20
c) Technical features, and maintenance and operating cost	0 to 20
d) Availability of service and spare parts	0 to 20
e) Standardization	0 to 20
f) Total	100

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

27. Contacting the Procuring Agency

27.1 Subject to ITB Clause 24, no Bidder shall contact the Procuring agency on any matter relating to its bid, from the time of the bid opening to the time the contract is awarded. If the Bidder wishes to bring additional information to the notice of the Procuring agency, it should do so in writing.

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

28. Post Qualification

28.1 In the absence of prequalification, the Procuring agency will determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated responsive bid is qualified to perform the contract satisfactorily, in accordance with the criteria listed in ITB Clause 13.3.

28.2 The determination will take into account the Bidder's financial, technical, and production capabilities. It will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB Clause 13.3, as well as such other information as the Procuring agency deems necessary and appropriate.

28.3 An affirmative determination will be a prerequisite for award of the contract to the Bidder. A negative determination will result in rejection of the Bidder's bid, in which event the Procuring Agency will proceed to the next lowest evaluated bid to make a similar determination of that Bidder's capabilities to perform satisfactorily.

29. Award Criteria

29.1 Subject to ITB Clause 31, the Procuring agency will award the contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined to be the lowest evaluated bid, provided further that the Bidder is determined to be qualified to perform the contract satisfactorily.

30. Procuring Agency's Right to Vary Quantities at Time of Award

30.1 The Procuring Agency 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.

31. Procuring Agency's Right to Accept any Bid and to Reject any or All Bids

31.1 The Procuring Agency reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to the affected Bidder or bidders or any obligation to inform the affected Bidder or bidders of the grounds for the Procuring agency's action.

32. Notification of Award

32.1 Prior to the expiration of the period of bid validity, the Procuring agency will notify the successful Bidder in writing by registered letter or by cable, to be confirmed in writing by registered letter, that its bid has been accepted.

32.2 The notification of award will constitute the formation of the Contract.

32.3 Upon the successful Bidder's furnishing of the performance security pursuant to ITB Clause 34, the Procuring agency will promptly notify each unsuccessful Bidder and will discharge its bid security, pursuant to ITB Clause 15.

33. Signing of Contract

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

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

34. Performance Security

34.1 Within twenty (20) days of the receipt of notification of award from the Procuring agency, the successful Bidder shall furnish the performance security in accordance with the Conditions of Contract, in the Performance Security Form provided in the bidding documents, or in another form acceptable to the Procuring agency.

34.2 Failure of the successful Bidder to comply with the requirement of ITB Clause 33 or ITB Clause 34.1 shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security, in which event the Procuring agency may make the award to the next lowest evaluated Bidder or call for new bids.

35. Corrupt or Fraudulent Practices

35.1 Procuring Agency's requires that Bidders/Suppliers/Contractors shall observe the highest standard of ethics during the procurement and execution of contracts. In pursuance of this policy, the Procuring agency:

a) defines, for the purposes of this provision, the terms set forth below as follows:

- i. “corrupt practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and
 - ii. “fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Procuring agency, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Procuring agency of the benefits of free and open competition;
- b) will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;
 - c) will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a contract.
- 35.2 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.

36. Integrity Pact

- 36.1 The Bidder shall sign and stamp the Integrity Pact provided at Form-12 to Bid in the Bidding Document for all University of Peshawar/Provincial Government procurement contracts exceeding Rupees ten million. Failure to such Integrity Pact shall make the bidder nonresponsive.

SECTION-II – GENERAL CONDITIONS OF CONTRACT

1. Definitions

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

- a) "Defects Liability Expiry Certificate" means the certificate to be issued by the Procuring agency to the Supplier, in accordance with the Contract.
- b) "Day" means calendar day.
- c) "Defects Liability Period" means the warranty period following the taking over, during which the Supplier is responsible for making good, defects and damage in Goods and Services provided, under the Contract.
- d) "GCC" means the General Conditions of Contract contained in this section.
- e) "SCC" means the Special Conditions of Contract.
- d) "Taking-Over Certificate" means the certificate to be issued by the Procuring agency to the Supplier, in accordance with the Contract.
- f) "The Contract" means the agreement entered into between the Procuring agency and the Supplier, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
- g) "The Contract Price" means the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations.
- h) "The Goods" means all of the equipment, machinery, and/or other materials which the Supplier is required to supply to the Procuring agency under the Contract.
- i) "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.
- j) "The Procuring agency" means the organization purchasing the Goods, as named in SCC.
- k) "The Procuring agency's country" is the country named in SCC.
- l) "The Supplier" means the individual or firm supplying the Goods and Services under this Contract.
- m) "The Project Site," where applicable, means the place or places named in SCC.

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 agency’s prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the Procuring agency in connection therewith, to any person other than a person employed by the Supplier in the performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
- 5.2 The Supplier shall not, without the Procuring agency’s prior written consent, make use of any document or information enumerated in GCC Clause 5.1 except for purposes of performing the Contract.
- 5.3 Any document, other than the Contract itself, enumerated in GCC Clause 5.1 shall remain the property of the Procuring agency and shall be returned (all copies) to the Procuring agency on completion of the Supplier’s performance under the Contract if so required by the Procuring agency.
- 5.4 The Supplier shall permit the Procuring agency to inspect the Supplier’s accounts and records relating to the performance of the Supplier and to have them audited by auditors appointed by the procuring agency, if so required.

6. Patent Rights

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

7. Performance Security

- 7.1 Within twenty (20) days of receipt of the notification of Contract award, the successful Bidder shall furnish to the Procuring agency the performance security in the amount specified in SCC.
- 7.2 The proceeds of the performance security shall be payable to the Procuring agency as compensation for any loss resulting from the Supplier’s failure to complete its obligations under the Contract.

- 7.3 The performance security shall be denominated in the currency of the Contract acceptable to the Procuring agency and shall be in one of the following forms:
- a) a bank guarantee, a bank draft, or an irrevocable letter of credit issued by a reputable bank located in the Procuring agency's country, in the form provided in the bidding documents or another form acceptable to the Procuring agency; or
 - b) a cashier's or certified check
- 7.4 The performance security will be discharged by the Procuring agency and returned to the Supplier not later than thirty (30) days following the date of completion of the Supplier's performance obligations under the Contract, including any warranty obligations, unless specified otherwise in SCC.

8. Inspections and Tests

- 8.1 The Procuring agency or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications at no extra cost to the Procuring agency. SCC and the Technical Specifications shall specify what inspections and tests the Procuring agency requires and where they are to be conducted. The Procuring agency shall notify the Supplier in writing, in a timely manner, of the identity of any representatives retained for these purposes.
- 8.2 The inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at point of delivery, and/or at the Goods' final destination. If conducted on the premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Procuring agency.
- 8.3 Should any inspected or tested Goods fail to conform to the Specifications, the Procuring agency may reject the Goods, and the Supplier shall either replace the rejected Goods or make alterations necessary to meet specification requirements free of cost to the Procuring agency.
- 8.4 The Procuring agency's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival in the Procuring agency's country shall in no way be limited or waived by reason of the Goods having previously been inspected, tested, and passed by the Procuring agency or its representative prior to the Goods' shipment from the country of origin.
- 8.5 Nothing in GCC Clause 8 shall in any way release the Supplier from any warranty or other obligations under this Contract.

9. Packing

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

including additional requirements, if any, specified in SCC, and in any subsequent instructions ordered by the Procuring agency.

10. Delivery and Documents

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

10.2 Documents to be submitted by the Supplier are specified in SCC.

11. Insurance

11.1 The Insurance coverage from the factory till the delivery and installation at the University of Peshawar, Peshawar is seller's responsibility.

12. Transportation

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

13. Incidental Services

13.1 The Supplier may be required to provide any or all of the following services, including additional services, if any, specified in SCC:

- a) performance or supervision of on-site assembly and/or start-up of the supplied Goods;
- b) furnishing of tools required for assembly and / or maintenance of the supplied Goods;
- c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods;
- d) performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and
- e) training of the Procuring agency's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.

13.2 Prices charged by the Supplier for incidental services, if not included in the Contract Price for the Goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged for other parties by the Supplier for similar services.

14. Spare Parts

14.1 As specified in SCC, the Supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:

- a) such spare parts as the Procuring agency may elect to purchase from the Supplier, provided that this election shall not relieve the Supplier of any warranty obligations under the Contract; and
- b) in the event of termination of production of the spare parts:
 - i. advance notification to the Procuring agency of the pending termination, in sufficient time to permit the Procuring agency to procure needed requirements;
 - ii. following such termination, furnishing at no cost to the Procuring agency, the blueprints, drawings, and specifications of the spare parts, if requested

15. Warranty

- 15.1 The Supplier warrants that the Goods supplied under the Contract are new, unused, of the most recent or current models, and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The Supplier further warrants that all Goods supplied under this Contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the Procuring agency's specifications) or from any act or omission of the Supplier, that may develop under normal use of the supplied Goods in the conditions prevailing in the country of final destination.
- 15.2 This warranty shall remain valid for twelve (12) months 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, or for eighteen (18) months after the date of shipment from the port or place of loading in the source country, whichever period concludes earlier, unless specified otherwise in SCC.
- 15.3 The Procuring agency shall promptly notify the Supplier in writing of any claims arising under this warranty.
- 15.4 Upon receipt of such notice, the Supplier shall, within the period specified in SCC and with all reasonable speed, repair or replace the defective Goods or parts thereof, without costs to the Procuring agency.
- 15.5 If the Supplier, having been notified, fails to remedy the defect(s) within the period specified in SCC, within a reasonable period, the Procuring agency may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Procuring agency may have against the Supplier under the Contract.

16. Payment

- 16.1 The method and conditions of payment to be made to the Supplier under this Contract shall be specified in SCC.
- 16.2 The Supplier's request(s) for payment shall be made to the Procuring agency in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and Services performed, and by documents submitted pursuant to GCC Clause 10, and upon fulfillment of other obligations stipulated in the Contract.
- 16.3 Payments shall be made promptly by the Procuring agency, but in no case later than sixty (60) days after submission of an invoice or claim by the Supplier.
- 16.4 The currency of payment is Bid Currency.

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 (Special Conditions of Contract) or in the Procuring agency's request for bid validity extension, as the case may be.

18. Change Orders

18.1 The Procuring agency may at any time, by a written order given to the Supplier pursuant to GCC Clause 31, make changes within the general scope of the Contract in any one or more of the following:

- a) drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Procuring agency;
- b) the method of shipment or packing;
- c) the place of delivery; and/or
- d) the Services to be provided by the Supplier.

18.2 If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or delivery schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this clause must be asserted within thirty (30) days from the date of the Supplier's receipt of the Procuring agency's change order.

19. Contract Amendments

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

20. Assignment

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

21. Subcontracts

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

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

22. 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 agency 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 agency in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the Procuring agency shall evaluate the situation and may at its discretion extend the Supplier's time for performance, with or without liquidated damages, in which case the extension shall be ratified by the parties by amendment of Contract.
- 22.3 Except as provided under GCC Clause 25, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to GCC Clause 23, unless an extension of time is agreed upon pursuant to GCC Clause 22.2 without the application of liquidated damages.

23. Liquidated Damages

- 23.1 Subject to GCC Clause 25, if the Supplier fails to deliver any or all of the Goods or to perform the Services within the period(s) specified in the Contract, the Procuring agency shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in SCC of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the percentage specified in SCC. Once the maximum is reached, the Procuring agency may consider termination of the Contract pursuant to GCC Clause 24.

24. Termination for Default

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

For the purpose of this clause:

- "corrupt practice" means the offering, giving, receiving or soliciting of 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 agency terminates the Contract in whole or in part, pursuant to GCC Clause 24.1, the Procuring agency may procure, upon such terms and in such manner as

it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the Procuring agency for any excess costs for such similar Goods or Services. However, the Supplier shall continue performance of the Contract to the extent not terminated.

25. Force Majeure

- 25.1 Notwithstanding the provisions of GCC Clauses 22, 23, and 24, the Supplier shall not be liable for forfeiture of its performance security, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
- 25.2 For purposes of this clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not restricted to, acts of the Procuring agency in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.
- 25.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Procuring agency in writing of such condition and the cause thereof. Unless otherwise directed by the Procuring agency in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

26. Termination for Insolvency

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

27. Termination of Convenience

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

28. Resolution of Disputes

- 28.1 The Procuring agency and the Supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

28.2 If, after thirty (30) days from the commencement of such informal negotiations, the Procuring agency and the Supplier have been unable to resolve amicably a Contract dispute, either party may require that the dispute be referred for resolution to the formal mechanisms specified in SCC. These mechanisms may include, but are not restricted to, conciliation mediated by a third party, adjudication in an agreed manner and/or arbitration.

29. Governing Language

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

30. Applicable Law

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

31. Notices

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

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

32. Taxes and Duties

32.1 Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods to the Procuring agency.

PART-TWO

SECTION-I: INVITATION TO BID

UNIVERSITY OF PESHAWAR

Invitation to Bid for Supply, Installation and Commissioning of Scientific/Lab Equipment **(ITB No. 05/UoP/MP-IV/ARL)**

1. Sealed bids on prescribed Tender Forms are invited from well reputed firms registered with Federal Board of Revenue for Income Tax (Active Taxpayers) and Sales Tax purposes for Supply, Installation and Commission of Scientific/Lab Equipment under the Project 'Strengthening of Academic and Professional Facilities at University of Peshawar', as per following schedule:

Activity	Date and Time
Pre-Bid Meeting and Site Survey	04-09-2018 at 10:00 AM
Last date for submission of Bid Documents (Separately Sealed Technical and Financial Proposals)	12-11-2018 up to 11:00 AM
Opening of Technical Proposals	12-11-2018 at 11:30 AM

2. The bidding documents including Contract Conditions and Item Specification can be obtained from the Office of Project Director, First Floor, Quaid-e-Azam College of Commerce, University of Peshawar, during office hours (8:00 AM to 4:00PM) on any working day (Monday-Friday) against a Fee of Rs.1000/-. The same may also be downloaded from the University of Peshawar website (www.uop.edu.pk) free of cost.
3. Selection would be made under 'Single Stage – Two Envelope Procedure'.
4. The bidders shall clearly and boldly mark the Tender description and date/time of opening at the face of sealed bid/envelope.
5. The Sealed bids, complete in all respects, must reach the office of Project Director, Strengthening of Academic and Professional Facilities at University of Peshawar, as per schedule above.
6. The Financial Proposal shall invariably be accompanied with Bid Security @ 2% of bid cost (Refundable) in the form of CDR drawn in the name of The Treasurer, University of Peshawar.
7. Bids submitted without prescribed Bid Security shall be liable for rejection at the time of bid opening.
8. Pre-bid meeting and Technical Proposal opening will be held in the Committee Room No.2, Main Administration Block, University of Peshawar, in the presence of the bidders.
9. The University of Peshawar reserves the right to reject any or all bids in accordance with rules in vogue.

Project Director
Strengthening of Academic and Professional Facilities at
University of Peshawar; Email: mp4@uop.edu.pk
091-9216757

SECTION-II: BID DATA SHEET

Bid Data Sheet

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

Introduction	
ITB 1.1	Federal Government through Higher Education Commission
ITB 1.1	Strengthening of Academic and Professional Facilities at University of Peshawar
ITB 1.1	Supply, Installation and Commissioning of Scientific/Lab Equipment
ITB 4.1	University of Peshawar, Peshawar, Khyber Pakhtunkhwa
ITB 6.1	04.09.2018
ITB 8.1	English
ITB 11.2	<p>The price quoted shall be Carriage Paid To (CPT) University of Peshawar at Peshawar and shall be inclusive of provision of the following incidental services: Site survey to determine prerequisites for the successful operation of the proposed equipment</p> <ol style="list-style-type: none"> 1. Embedding safety features in the equipment, affix bilingual warnings and caution notices and protection of power sources, controls and critical components 2. Furnishing of tools required for assembly and maintenance of the Equipment 3. Labeling of equipment, cables, connectors, boxes etc. 4. Installation, Configuration/Calibration, and Commissioning of Equipment by the Factory Trained Engineer. 5. Provision of Installation, Configuration, Application, Operational and Preventive Maintenance/Repair Manual of Equipment in printed and soft form 6. Provision of Original Life-Time Licensed Software alongwith its Manual/(s) on CD/DVD 7. Loading/Unloading at the port of import, unloading at the procuring agency's site, import customs clearance at port. 8. The equipment will be imported, carried, transported and installed at complete risk and cost of the seller. The risk will be transferred to Procuring Agency only after successful installation/operation of the equipment. 9. Application, Operations, Preventive Maintenance/repair Training by Factory Training Engineer (having factory training certificate) to the Procuring agency's personnel at the Procuring Agency's site after installation of equipment 10. Three-year free-of-cost maintenance and repair of the Equipment from the date of its commissioning
ITB 11.5	The Price quoted by the bidder shall be fixed during the Bidder's performance of the Contract. No variation shall be allowed on any account.

ITB 12.1	<ul style="list-style-type: none"> ➤ For equipment, that the bidder will supply/provide from within Pakistan, the bid currency shall be Pakistani Rupee (PKR); ➤ For equipment that the bidder will import/supply from outside Pakistan through LC, the bid currency may be any foreign currency
Preparation and Submission of Bids	
ITB 13.3 (a)	1. The bidder shall submit Authorized Dealership Certificate and Manufacturer Authorization Letter
ITB 13.3 (d)	<p><u>Firm Level requirements for establishing bidder’s eligibility and qualification:</u></p> <p>A. Mandatory Requirements/Knock Out Criteria:</p> <ol style="list-style-type: none"> 1. Brief Company Profile 2. Name of Owner alongwith copy of CNIC 3. Certificate of Firm Registration 4. Active Income Tax Payer Status 5. Active Sales Tax Payer Status 6. Annual Turnover of at least two-times (double) the bid value 7. At least five years’ experience in supply, installation and commissioning of similar equipment 8. Bidder is not under a declaration of ineligibility 9. Upon request, bidder must arrange onsite visit where the solution is deployed 10. Bid Security amounting to 2% of the bid cost is attached with the Financial Proposal (Price Schedule) in the form of Cash Deposit Receipt (CDR) issued by a reputable scheduled bank <p>B. Scoring Criteria (At least 70% marks are required to Technically Qualify)</p> <ol style="list-style-type: none"> 1. Bidder’s years of Service 2. Bidder’s experience in Supply and Installation of Hi-Tech Lab Equipment worth more than Rs.1.0 million each 3. Qualified technical staff employed by the bidder 4. Support and Service Centres of the bidder <p><u>Product/Equipment Level Mandatory Requirement:</u></p> <ol style="list-style-type: none"> 1. Authorized dealership certificate from the manufacturer 2. Manufacturer Authorization Letter/Certificate for participating in this tender 3. Technically qualified engineers to install/configure/calibrate/commission and maintain the product, and provide the after-sales service 4. The quoted product/equipment shall meet or exceed the Technical Specifications mentioned in the Part-Two: Section-V (Technical Specifications) of this document 5. Upon request, bidder must arrange visit for the Procuring Agency’s Committee, to the site where the equipment is deployed
ITB 14.3 (b)	<p>A list giving full particulars of Spare parts, Consumable Parts, special tools etc. necessary for the proper and continuing functioning of the equipment is required for 3 (Three) years of operation following the configuration and commencement of the use of equipment.</p> <p>The Financial Proposal shall accompany price list of the spare parts and consumable parts required for the continuing successful functioning of the equipment. The prices so quoted shall be locked for a period of 3 (three) years following the configuration and commencement of the use of equipment, and the supplier shall be bound to supply the said parts at the quoted price for a period of</p>

	3 (three) years following the configuration and commencement of the use of equipment or 2 (two) years after the expiry of the warranty, whichever is later.
ITB 14.3 (c)	Technical Specification Compliance Form (provided in this bidding document) shall be duly filled-in and submitted for each quoted equipment.
ITB 15.1	2% of the Quoted CPT-UoP Price in shape of CDR in favor of Treasurer, University of Peshawar to be attached with Financial Bid. Where quoted price is in foreign currency, the rate of exchange shall be the selling rate, prevailing two-days before the date of opening of Technical Bids specified in the Bid Data Sheet, as notified by the State Bank of Pakistan. However, CDR No., Date and Name of Issuing Bank shall be provided alongwith Technical Bid.
ITB 16.1	Bid validity period shall be 90 (Ninety) days.
ITB 17.1	One Original and One Copy
ITB 18.2 (a)	Project Director, Strengthening of Academic and Professional Facilities at University of Peshawar, First Floor, Quaid-e-Azam College of Commerce, University of Peshawar, Peshawar, Pakistan.
ITB 18.2 (b)	Supply, Installation and Commissioning of Scientific/Lab Equipment; ITB No.05/UoP/MP-IV/ARL
ITB 19.1	25.09.2018 upto 10:00 AM
ITB 22.2	<p>A. Technical Proposal:</p> <ol style="list-style-type: none"> 1. Form-1: Bid Form 2. Form-2: Firm Level Eligibility and Qualification Requirements Form 3. Form-3: Product Level Mandatory Qualification Requirements Form 4. Form-4: Technical Specification Compliance Form 5. Literature, drawings, and data of quoted products 6. A detailed description of the essential technical and performance characteristics of the goods 7. 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 of 3 (Three) years, following commencement of the use of the goods by the Procuring agency; <p>B. Financial Proposal:</p> <ol style="list-style-type: none"> 1. Form-5: Price Schedule 2. Bid Security (CDR in Original)
ITB 23.1	25.09.2018 at 10:30 AM, Committee Room No.2, Main Administration Block, University of Peshawar, Peshawar
Bid Evaluation	
ITB 26.2	Item/Equipment Basis
ITB 26.3	All prices will be converted into Pakistani Rupee (PKR); 12.11.2018
ITB 26.5	Criteria for bid evaluation. 26.5.a. Deviation in Payment Schedule 26.5.b. Specific Criteria indicated in the Bid Data Sheet and/or Technical Specifications
ITB 26.6 (a)	<u>Incidental Cost</u> The CPT price shall be inclusive of Incidental Services required by the Procuring Agency.
ITB 26.6 (b)	<u>Delivery Schedule</u> The goods covered under this invitation are required to be delivered/installed/commissioned at the University of Peshawar within an acceptable range of weeks

	specified in the Schedule of Requirement. No credit will be given to earlier deliveries, and bids offering delivery beyond this range will be treated as nonresponsive.
ITB 26.6 (c)	<u>Payment schedule</u> Bidders shall state their bid price for the payment schedule outlined in the SCC. The bids deviating from the payment schedule outlined in the SSC will be treated as nonresponsive.
ITB 26.6 (h)	<u>Meet or Exceed the Technical Specifications</u> The quoted Equipment shall meet or exceed the Technical Specification given in the bidding document. A bid quoting equipment which does not meet the Technical Specification shall be rejected by the Procuring agency as nonresponsive. Bidders shall submit the duly filled-in Technical Specification Compliance Form for each quoted equipment. Non submission of the Technical Specification Compliance Form will render the bid nonresponsive.
ITB 30.1	15% (fifteen percent)

SECTION-III: SPECIAL CONDITIONS OF CONTRACT

1. Definitions (GCC Clause-1)

- 1.1 GCC 1.1 (g)—The Procuring agency is University of Peshawar, Peshawar
- 1.2 GCC 1.1 (h)—The Procuring agency's country is Islamic Republic of Pakistan
- 1.3 GCC 1.1 (i)—The Supplier is: _____
- 1.4 GCC 1.1 (j)—The Project Site is University of Peshawar, Peshawar

2. Country of Origin (GCC Clause-3)

- 2.1 All goods and services to be supplied under the contract must be from that origin/country/region that is allowed to do business in Pakistan by the law of Government of Pakistan.

3. Performance Security (GCC Clause 7)

- 3.1 The successful bidder shall furnish Performance Security as under:
 - a) within twenty (20) days of the receipt of the notification of Contract award;
 - b) in the form of a Bank Guarantee, issued by a scheduled bank operating in Pakistan, as per the format provided in the Tender Document, or in the form of CDR (Cash Deposit Receipt) issued by a scheduled bank operating in Pakistan;
 - c) for a sum equivalent to 10% of the contract value;
 - d) denominated in Pak Rupees;
 - e) have a minimum validity period until the date of expiry of warranty period, support period or termination of services, or fulfillment of all obligations under the contract, whichever is later. Performance Security shall not be acceptable with any validity less than the prescribed time period.
 - f) the Supplier shall cause the validity period of the Performance Security to be extended for such period(s) as the contract performance may be extended.
- 3.2 The Performance Security shall be payable to the Procuring agency, on occurrence of any / all of the following conditions:
 - a) If the Supplier commits a default under the Contract;
 - b) If the Supplier fails to fulfill the obligations under the Contract;
 - c) If the Supplier violates any of the terms and conditions of the Contract.
- 3.3 If the Supplier fails / delays in performance of any of the obligations, under the Contract / violates any of the provisions of the Contract / commits breach of any of the terms and conditions of the Contract the Procuring agency may, without prejudice to any other right of action / remedy it may have, forfeit Performance Security of the Supplier.
- 3.4 The Performance Security shall be discharged and returned to the Supplier on his written request within thirty working days following the date of completion of the Supplier's performance obligations under the contract, including warranty obligations.

4. Inspections and Tests (GCC Clause 8)

- 4.1 The Procuring Agency shall inspect and test the Goods supplied, the Services provided or the Works carried out, under the Contract, to verify their conformity to the Technical Specifications and Incidental Services (Site preparation etc.), where required.
- 4.2 The inspections and tests shall be conducted at the premises of the Procuring agency. The Supplier shall provide all-reasonable facilities and assistance, including access to drawings, provision of qualified technical staff, production data and online verification from official web site of the Manufacturer, to the inspectors, at no charge to the Purchaser.
- 4.3 The Procuring Agency may reject the Goods, the Services or the Works if they fail to conform to the Technical Specifications, in any test(s) or inspection(s) and the Supplier shall either replace the rejected Goods, Services or Works or make all alterations necessary to meet the Technical Specifications, within three working days, free of cost to the Procuring agency.
- 4.4 The Procuring Agency's post-delivery right to inspect, test and, where necessary, reject the Goods shall in no way be limited or waived by reason of pre-delivery inspection, testing or passing of the Goods.
- 4.5 Pursuant to the successful commissioning, inspection and testing of the goods at the Procuring agency's site, the Supplier shall, by written notice served on the Procuring agency apply for a Taking-Over Certificate.
- 4.6 The Procuring agency shall, within fourteen days of receipt of Supplier's application, either issue the Taking-Over Certificate to the Supplier, stating the date of successful inspection / testing of the Goods or any portion thereof, for their intended purposes; or reject the application giving the reasons and specifying the work required to be done by the Supplier to enable the Taking-Over Certificate to be issued.
- 4.7 Nothing contained in this Clause shall, in any way, release the Supplier from any Warranty or other obligations under the Contract.

5. Packing (GCC Clause 9)

- 5.1 The Supplier shall provide such packing of the Goods as is sufficient to prevent their damage or deterioration during storage / transit to their final destination as indicated in the Contract. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the final destination and withstand, without limitation, rough handling, exposure to extreme temperatures, salt and precipitation at all points in storage / transit. The Supplier shall arrange and pay for the packing of the Goods to the place of destination as specified in the Contract, and the cost thereof shall be included in the Contract Price.

6. Delivery and Documents (GCC Clause 10)

GCC 10.2 – Documents to be submitted by the Supplier

- 6.1 Upon shipment, the Supplier shall notify the Procuring agency the full details of the shipment, including Contract number, description of Goods, quantity and usual transport document. The Supplier shall mail the following documents to the Procuring agency:
 - a) copies of the Supplier's invoice showing Goods' description, quantity, unit price, and total amount;

- b) original and two copies of the usual transport document (for example, a negotiable bill of lading, a non-negotiable sea waybill, an inland waterway document, an air waybill, a railway consignment note, a road consignment note, or a multimodal transport document) which the buyer may require to take the goods;
- c) copies of the packing list identifying contents of each package;
- d) insurance certificate;
- e) Manufacturer's or Supplier's warranty certificate;
- f) inspection certificate, issued by the nominated inspection agency, and the Supplier's factory inspection report;
- g) certificate of origin.
- h) Original copies of Delivery Note / Challan (in duplicate) showing name of destination to which delivery is to be made, item's description,
- i) batch No(s), Registration No, manufacturing and expiry date and quantity.
- j) Original copies of the Supplier's invoices (in duplicate) showing warranty, name of Procuring Agency /destination to which delivery is to be
- k) Original copies of the Sales Tax Invoices (where applicable) in duplicate showing name of destination to which delivery is to be made;

7. Insurance (GCC Clause 11)

- 7.1 GCC 11.1—The Insurance coverage from the factory till the delivery and installation at the University of Peshawar, Peshawar is supplier's responsibility.

8. Incidental Services (GCC Clause 13)

Site Survey

- 8.1 The Supplier shall be responsible to survey the site, and determine power, air conditioning, floor space, and any additional requirements for the successful operation of the proposed equipment.

Safety

- 8.2 The Supplier shall be responsible for the embedding of safety features in the inherent design of the equipment, for elimination of identified hazards, including but not limited to high voltage, electromagnetic radiation, sharp points and edges, etc., and reduction of associated risk to personnel and equipment.
- 8.3 The Supplier shall be responsible for the addition of bilingual warnings and caution notices, where hazards cannot be eliminated or risks cannot be reduced.
- 8.4 The Supplier shall be responsible for the protection of the power sources, controls, and critical components of the systems and subsystems by shielding or physical separation where possible.

Furnishing of Tools required for Assembly and Maintenance of Equipment

- 8.5 The Supplier shall furnish such tools which are required for assembly, and corrective and preventive maintenance of Equipment. Such tools shall be state-of-the-art in design aimed at providing an efficient, systematic and cost effective repair operation for all replaceable components.

Labeling

- 8.6 The Goods supplied under the Contract, shall be clearly labeled so as to correspond with the delivered documentation, with proper labeling scheme. All equipment, cables, connectors, and boxes shall be clearly labeled.

Installation, Configuration/Calibration, and Commissioning

- 8.7 The Supplier shall install, configure/calibrate, commission and operationalize the equipment at the Procuring agency's site.

Provision of Installation, Configuration, Operational and Maintenance Manual

- 8.8 The Supplier shall provide a detailed installation, configuration/calibration, operational and maintenance manual for each equipment.

- 8.9 The manual shall be provided in both printed form as well as on CD/DVD.

Provision of Original Life-Time Licensed Software alongwith Its Manual on CD/DVD

- 8.10 The Supplier shall provide Original Life-Time licensed software (alongwith all License/ Database Keys) alongwith its manual/(s) on CD/DVD.

- 8.11 Software includes software required for operations of the equipment and software required for the tests etc. to be performed on the equipment.

Fee-of-Cost Maintenance and Repair

The Supplier shall provide three-year free-of-cost maintenance and repair of the Equipment commencing from the date of its commissioning. This includes provision of services for replacement of spare parts and consumable parts.

Training

- 8.12 The Supplier shall train Procuring Agency's personnel for Application, Operations, Preventive Maintenance/repair each equipment provided by him. The training shall be imparted by Factory Trained Engineer (having factory training certificate) at the Procuring Agency's site after installation of equipment.

- 8.13 The training shall cover all aspects, including but not limited to, assembly, start-up, calibration, operation, maintenance, and repair of the supplied equipment.

Miscellaneous

- 8.14 Loading/Unloading at the port of import, unloading at the procuring agency's site, import customs clearance at port.

- 8.15 The equipment will be imported, carried, transported and installed at complete risk and cost of the seller. The risk will be transferred to Procuring Agency only after successful installation/operation of the equipment.

Signing of Service Level Agreement

- 8.16 The Supplier shall sign a Service Level Agreement with the Procuring agency for provision of spare parts and maintenance services for a period of five years following expiry of first three years period after successful installation/operation of the equipment.

9. Spare Parts and Consumable Parts (GCC Clause 14)

- 9.1 The Supplier shall provide free of cost spare parts and consumable parts required for operations of the equipment during the warranty period.
- 9.2 The Supplier shall maintain sufficient backup stock of spare parts, consumable parts and tools locally at sites, for the maintenance of the supplied Goods, during the warranty period.
- 9.3 The Supplier shall ensure availability of spare parts, consumable parts, and technical assistance for all components for at least three years, without major changes, after the completion of final acceptance.
- 9.4 The Supplier shall provide spare parts and consumable parts for all components for at least 3 (three) years after the configuration and commencement of the use of the equipment or 2 (two) years after the expiry of warranty period, whichever is later, at the prices quoted in the financial proposal.
- 9.5 The Supplier shall give six-months advance notice on any discontinued part(s) with a suggestion for appropriate alternatives failing which will cause forfeiture of Performance Guarantee.
- 9.6 The Supplier shall also identify and provide the following:
- a) items (repairable spares, parts and consumable supplies) that are needed to maintain design performance, reliability and availability standards prescribed in the Technical Specifications. The quantity of spare parts and consumable items provided and kept shall be equal to the requirements for one year of operating stock;
 - b) critical items, whose failure would cause a system failure;
 - c) items of high cost and/or long lead time (over thirty working days);
 - d) items whose design reliability is such that normal stock replenishment would not justify maintaining a level of the item in stock.

10. Warranty (GCC Clause 15)

GCC 15.2 – Warranty Period

- 10.1 The Supplier shall provide Manufacturer's warranty for one-year after the commissioning of the Equipment including its parts, software and Services, or any portion thereof, as the case may be, which will include:
- a) Free, on site repair / replacement of defective / damaged parts and labor, within one week of intimation. This includes free replacement of parts and provision of service

required thereto for replacement and reconfiguration/recalibration of the equipment;

- b) Free on site replacement of defective / damaged Goods within one week, if repair of such Goods involves a duration exceeding one week. This includes free replacement of parts and provision of service required thereto for replacement and reconfiguration/ recalibration of the equipment;
- c) Replacement of the whole unit at site including transportation, installation, testing & commissioning etc. in case of major defect in the equipment.
- d) Free periodic maintenance of the Equipment.

GCC 15.4 & 15.5 – The period for corrections in defect

- 10.2 The period for corrections of defects in the warranty period is one week.
- 10.3 The Supplier shall, after expiry of the warranty period, by written notice served on the Procuring agency, apply for a Defects Liability Expiry Certificate.
- 10.4 The Procuring agency shall, within thirty days of receipt of such notice, either issue the Defects Liability Expiry Certificate to the Supplier, stating the date of expiry of the Warranty Period for all the Goods supplied and fulfillment of all obligations by the Supplier, under the Contract; or reject the application giving the reasons and specifying the work required to be done by the Supplier to enable the Defects Liability Expiry Certificate to be issued.
- 10.5 The Supplier shall clearly mention Terms and Conditions of service level agreements (SLA) for the Goods supplied after the expiry of initial warranty period. In case of International Warranties, the local authorized dealers shall mention their service and warranty setup, details of qualified engineers, etc.

11. Payment (GCC Clause 16)

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

- 11.1 No Advance payment shall be allowed.
- 11.2 Where the Supplier requires the Procuring agency to open LC at Sight for import of equipment, the Supplier shall provide Performa Invoice from the Principal. The Procuring Agency will approach a scheduled bank to establish an irrevocable and non-transferable Letter of Credit of net CPT value in favour of the Principal. The entire expenses related to opening, confirmation (if desired by the supplier), interest, commission and other charges in connection with establishing Letter of Credit will be borne by the Supplier. The Procuring Agency will release payment in the manner specified hereunder:
 - 11.2.1 **50%** payment of the total value of the contract will be paid to the firm on receipt of following advance / shipping / insurance documents: -
 - (1). 3x Copies of negotiable Bill of Lading / Airway bill.
 - (2). 8x Copies of Commercial Invoice (in original).
 - (3). 2x copies of non-negotiable Bill of Lading / Airway Bill.

- (4). Packing List.
- (5). One-year Warranty certificate.
- (6). Insurance Premium Receipt.

11.2.2 25% of the total value of the contract will be made on receipt of the equipment at the Procuring Agency's site.

11.2.3 Balance 25% of the total value of contract will be made on successful commissioning of the equipment.

11.3 A firm that requires 100% payment of the total value of the contract on receipt of advance / shipping / insurance documents shall be required to submit a Bank Guarantee equivalent to fifty percent (50%) of the total contract value alongwith the copies of bill of lading/packing list etc. The aforesaid Bank Guarantee will be released after successful installation/commissioning of the equipment.

11.4 Where the Supplier requires the Procuring agency to open LC on Usance basis, the Supplier shall provide Performa Invoice from the Principal. The entire expenses related to opening, confirmation (if desired by the supplier), interest, commission and other charges in connection with establishing Letter of Credit will be borne by the Supplier. The Procuring agency will make payment within 60 days from the satisfactory installation / commissioning / inspection of the respective equipment.

12. Prices (GCC Clause 17)

GCC 17.1 --- Price adjustment/variation shall not be allowed.

10.1 The Supplier shall not charge prices for the Goods supplied, the Services provided and for other obligations discharged, under the Contract, varying from the prices quoted by the Supplier in the Price Schedule.

13. Liquidated Damages (GCC Clause 23)

GCC 23.1—Percentage of Liquidated Damages

13.1 A sum of money @0.1% of the total Contract Price which is attributable to such part of the Goods / the Services / the Works, in consequence of the failure / delay, be put to the intended use, for every day between the scheduled delivery date(s), with any extension of time thereof granted by the Purchaser, and the actual delivery date(s). Provided that the amount so deducted shall not exceed, in the aggregate, 10% of the Contract Price attributable to such part of Goods.

14. Resolution of Disputes (GCC Clause 28)

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

14.1 If, after thirty working days, from the commencement of such informal negotiations, the Procuring agency and the Supplier have been unable to amicably resolve a Contract dispute, either party may, require that the dispute the dispute shall be referred to for the decision of

Vice Chancellor, University of Peshawar, Peshawar. His decision shall be final and binding on both the parties.

14.2 Only the Courts at Peshawar shall have exclusive jurisdiction to adjudicate upon any “lis” brought by either of the parties in relation to the contract.

15. Governing Language (GCC Clause 29)

13.1 The Governing Language shall be English.

16. Applicable Law (GCC Clause 30)

GCC 30.1- Applicable Law

16.1 The Contract shall be interpreted in accordance with the laws of Islamic Republic of Pakistan.

17. Notices (GCC Clause 31)

GCC 31.1—Address for notice purposes:

Procuring agency:

Project Director,
Strengthening of Academic and Professional Facilities at University of Peshawar
Office at Quaid-e-Azam College of Commerce, University of Peshawar, Peshawar
Khyber Pakhtunkhwa, Pakistan
mp4@uop.edu.pk; 091-9216757

Supplier’s Address:

SECTION-IV: SCHEDULE OF REQUIREMENTS

The delivery schedule expressed as weeks stipulates hereafter a delivery date which is the date of delivery required.

S.No.	Item	Qty	Delivery Period ¹ from the date of Purchase Order	Location of Delivery, Installation and Commissioning
1	Power Lab with Organ Bath	1	Within twelve weeks	University of Peshawar, Peshawar
2	Fluorescence Spectrometer	2	Within twelve weeks	University of Peshawar, Peshawar
3	UV-visible Diffuse Reflectance Spectrophotometer	1	Within twelve weeks	University of Peshawar, Peshawar
4	Real time PCR	1	Within twelve weeks	University of Peshawar, Peshawar
5	TPR/TPD Lab	1	Within twelve weeks	University of Peshawar, Peshawar
6	Water purification system	1	Within twelve weeks	University of Peshawar, Peshawar
7	Automated protein purification system	1	Within twelve weeks	University of Peshawar, Peshawar
8	DNA Sequencer/Analyzer	1	Within twelve weeks	University of Peshawar, Peshawar
9	Gas Chromatograph - Mass Spectrometer (GC- MS)	1	Within twelve weeks	University of Peshawar, Peshawar
10	X-Ray Diffraction Spectrometer (XRD) with Thin Film Analysis Attachment	1	Within twelve weeks	University of Peshawar, Peshawar
11	Vibrating sample magnetometer (VSM)	1	Within twelve weeks	University of Peshawar, Peshawar
12	Preparative HPLC with all accessories	1	Within twelve weeks	University of Peshawar, Peshawar
13	Fluorescent microscope	1	Within twelve weeks	University of Peshawar, Peshawar
14	Uv/Vis NIR System	1	Within twelve weeks	University of Peshawar, Peshawar
15	FT-IR with ATR	1	Within twelve weeks	University of Peshawar, Peshawar

Note: The above equipment shall be installed at the location identified by the Procuring agency complete in all respects with installation, testing & commissioning.

¹ Delivery Period means period in which the equipment shall be delivered, installed, configured and commissioned at the location identified by the University of Peshawar, Peshawar.

SECTION-V: TECHNICAL SPECIFICATIONS

S.No.	Equipment	Specifications
1	Power Lab with Organ Bath	<p>Multi-Channel Power Lab (Minimum four channels)</p> <p>Data Acquisition Systems-Recording Systems</p> <ul style="list-style-type: none"> • A dual Bio Amp, isolated stimulator, trigger input and independent analog outputs • LabChart Teaching Suite. • LabTutor for new installation. • Bio Amp Cable, Smart Adapter. • USB interface for connection to Windows and computers and has an aggregate sampling rate of up to 100k samples per channel. <p>Bridge amplifier... for amplification of signals received from transducers</p> <p>Force Transduce: (5mg -25 g) with a resolution of 2 mg.</p> <p>Isotonic Transducer.</p> <p>Transducers: High Grade Isotonic Transducer</p> <p>Desktop computer system....</p> <p>Labchart for recording the changes in tension of isolated tissues.</p> <ul style="list-style-type: none"> • Dose Response software for analysis of dose response measurements and other software for analysis of tissue data. • Digital Precise Circulation Water Bath • Thermocirculator ...For regulation of temperature and circulation to organ baths • Measuring graduated Jugs...for preparation of solutions • Clamps...for support • Micropipette Adjustable Individually Calibrate, Fully Autoclaveable (10-100 uL, 100-1000 uL, 1000-5000 uL) • Micropipette tips • Thermometer... temperature measurement • Carbogen/Oxygen cylinder ...for tissue aeration • Steel rods and stainless steel hooks for support to isolated tissues and gas supply • Reservoir bottles (1.5L) for physiological salt solutions • Drainage pipes for supply and draining of solutions • Heating lamp • Surgical tools • Power connections cords (USB cables and Power Cables) • Brushes, loops, plastisin, needles etc <p>Tissue organ bath</p> <ul style="list-style-type: none"> • Students Organ Bath with 25 ml ~ 50 ml tissue baths (four baths) with leak proof joints, having fine thermostatic temperature control, • Temperature Display • Temperature Range: Room Temperature to 50°C ± 0.1°C Temperature Stability in the whole water heat tank • Power supply: 110-240 V. • Stainless Steel Oxygen tube • Flow and Drain System • Fully compatible with power lab system <p>Accessories including dust cover cloth & brushes, power cord, spare bulb, spare fuses, frog board,</p>

2	Fluorescence Spectrometer	<p>Detection modes: UV-Vis absorbance, Fluorescence intensity, Luminescence, Fluorescence polarization</p> <p>Source: Xenon flash lamp</p> <p>Detector: Silicon Diode</p> <p>Optics: Monochromator should cover the following ranges: Excitation 200-800 nm with zero order selectable, Emission 200-650 nm with zero order selectable 200-900 nm with zero order selectable</p> <p>Wavelength accuracy: (± 1 nm) Wavelength:(± 0.5 nm)</p> <p>Reproducibility Spectral band pass: The excitation slits and emission slits should be varied and selected in 10 nm band pass.</p> <p>Scanning speed: 10-1500 nm/minute with increment of 1 nm</p> <p>Sensitivity: At 350 nm, should be 500: 1 RMS measuring noise on the Raman peak, and should be 2000: 1 RMS measuring noise on the baseline.</p> <p>Standard sample: Should be a single position water thermostatic holder for 10 nm cuvettes.</p> <p>Computer controlled: Yes</p> <p>Data acquisition: Instrumental parameters should be controlled by software Computer, Printer</p> <p>Accessories: Other requisite accessories including one spare Xenon Lamp, and 10 Sample Cells (Quartz)</p>
3	UV-visible Diffuse Reflectance Spectrophotometer (190-1100 nm)	<p>UV/Vis Spectrometer Compact Size: Diffuse Reflectance/Transmittance with printing and built-in data processing options</p> <p>Wavelength range: 190-1100 nm (designs with wavelength expansion kit to extend the measurement wavelength range will be preferred)</p> <p>Spectral Bandwidth: 0.5, 1, 2, 5, 20 nm</p> <p>Detector: Si diodes, high sensitivity</p> <p>Sample and Reference Source lamp: Tungsten / Deuterium</p> <p>Wavelength Accuracy: ± 0.1 nm at D2 peak @ 656.1 nm, ± 0.3 nm for full range.</p> <p>Wavelength Reproducibility: ± 0.1 nm</p> <p>Photometric Accuracy: $\pm 0.002A$ (0-0.5 Abs), $\pm 0.004A$ (0.5-1 Abs)</p> <p>Photometric Reproducibility: ± 0.001 Abs @ 0.5 Abs</p> <p>Stray light: $< 1.0\%$ (198 nm KCL), $< 0.02\%$ (220 nm NaI), $< 0.02\%$ (340 nm NaNO₂)</p> <p>Photometric Noise: < 0.00005 Abs (at 700 nm, RMS)</p> <p>Baseline Flatness: ± 0.0005 Abs (After one-hour warm-up)</p> <p>Baseline Stability: < 0.0003 Abs/h (700nm, after One hour warm up)</p> <p>Maximum Scan Rate: 3000 nm/min</p> <p>Maximum Slew Rate: 8000 nm/min</p> <p>Signal to noise ratio: Extremely high signal to noise ratio</p> <p>Cell holder for gas, liquid and powder samples: At least three sets of each</p> <p>Computer: Branded Computer with 19" LED Monitor Printer: HP LaserJet Printer 1102 or equivalent</p> <p>Soft wares: Licensed complete software for instrument, accessory control, and data analysis.</p> <p>Versatility: Ideal for use in biotechnology, environmental, genetics, manufacturing, pharmaceutical QA/QC and academic labs</p> <p>Accessories: All requisite accessories</p>

4	Real time PCR	<p>Thermal Cycling System: Peltier-based, 96 – 120 well block</p> <p>Optical System: Multiple Led filters and Diode or led camera with halogen lamp excitation; at least five excitation and five emission filters or better</p> <p>Reaction Volumes: 5–30 μL, 10–100 μL.</p> <p>Sample Format: Fast 96-well plates optimized for 10 μL reactions.</p> <p>Peak Block Heating Rate: 5.5°C.</p> <p>Temperature Range: 4–100°C.</p> <p>Temperature Accuracy: +/- 0.25°C of setpoint/display temperature, measured at 3 minutes after clock start.</p> <p>Temperature Uniformity: +/- 0.50°C, 30 seconds after clock start.</p> <p>Software Specifications: Quantification with standard curve, Comparative Ct, melt curve analysis, Relative Standard Curve, Allelic Discrimination, Plus/Minus Dye Discrimination Multicomponenting algorithm, end point analysis</p> <p>Multiplate Data Comparison: Compare an unlimited number plates of gene expression assays Multiplex Capability Multiplex up to five targets per well.</p> <p>The equipment shall be Calibrated with following Registered Dyes at Installation: FAMTM /SYBR Green, VIC /JOETM, NEDTM /TAMRATM /Cy3, ROX TM /Texas Red, and Cy5.</p>
5	TPR/TPD Lab	<p>Capability: BET Surface Area, Pulse Titration (metal area) TPR, TPO, TPD</p> <p>Accessories Features: Injection Loop, Calibration Port, Quartz Glassware, Self-sealing Sample Cell, Holders, Stainless-Steel Plumbing, Multiple-Gas Selector Valve, Variable Gas Flow, Rate Control, Sample Cell Bypass, In-Line Cold Trap with Bypass, User Adjustable Detector Sensitivity, Multi-Function Display, Built-In Peak Area Integrator High Temperature 450°C, Heating Mantle High Temperature 1100°C, Furnace Heating Rate 1 to 20 deg/min 1000°C to 1100°C, PID Programmable Controller, In-Situ Sample, Thermocouple, Data Acquisition, Interface & Software, Mass Flow Controller/Gas Blender option.</p> <p>Hardware: Thermal Conductivity Dual-Filament, Detector Diffusion Type, TCD Filaments Oxidation and, Ammonia Resistant, Filament Current Adjustable, Continuously Variable Sensitivity, Dynamic Range: 512, Gas Input Ports5, Loop Volumes Supplied 50, 100, 250 μL (others available), Heating Mantle, Max temp 450°C, Mantle Power 125 W, Set-point Controller 1 degree increments Furnace, Max Temp 1100°C Furnace Power 575 W, Controller Type Full PID, programmable Controller Tuning Automatic Program Steps Ramp, Hold (soak) Ramp Types Rate, Time Furnace Heating Rate, 1 to 100 deg/min up to 500°C Furnace Heating Rate, 1 to 50 deg/min 500°C to 750°C Furnace Heating Rate 1 to 30 deg/min 750°C to 1000°C Furnace Heating Rate 1 to 20 deg/min 1000°C to 1100°C</p>

		<p>Performance Volume Adsorbed 0.001 to >100cm³ Specific Volume 0.0001 cm³/g Total Surface Area 0.1 to 280 m² Specific Surface Area 0.01 m²/g to upper limit set only by weighing accuracy of smallest sample Pore Volume 0.0001 to 0.15 cm³ Accuracy, Volume ± 1%, Reproducibility 0.5% Gases Compatibility: H₂, O₂, CO, CO₂, , N₂O, SO₂, NH₃, N₂, Ar, Kr, He, any other Input Pressure (gauge): 70-140 kPa Gas Lines: 5 x 1.5m 1/8" s.s. (supplied) Vent: hose barb connector Electrical Voltage: 100 - 240 VAC, Frequency: 50/60 Hz. Accessories: Reference Materials, Gas Regulator Assembly, Rotary Micro Riffler, Gas Blender (Mass Flow Controller)</p>
6	Water purification system	<p>Capacity: The amount of treated water: 20 L Membrane module: Ultra filtration polymeric membrane (Poly Sulfone). Also, have ion exchange resins options. Infusion pump: 3 Sets Flow rate: 20 lit / hour UV lamp: The generated water should be treated with UV to destroy bacteria through a vertically placed dual wavelength (185 & 254nm) cathode, UV lamp with ballast and quartz sleeve placed in an electro polished housing. Calibration meters: Should have digital calibrated meters for continuous monitoring and display of water quality parameter Activation: Activatable with fast flush and air purge Safety: Should meet internationally recognized safety norms Product/Analytical grade water should have: Inorganic/Resistivity: 18.2 MΩ-cm TOC: <1 ppb Bacteria: <0.1 CFU/ml Bacterial endotoxin: <0.1 CFU/ml pH: Effectively neutral Conductivity: <5 mS/cm Free Chlorine: <0.05ppm, Carbon Dioxide: <1ppm Sodium: (ppb)< 1 Chloride: (ppb) < 1 Total Silica: (ppb) < 3 Feed water tolerances: Temperature: 1 to 40°C Feed water Pressure: flooded suction (1psi/0.07 Bar) to 10psi/0.7bar Weight: 14.5kg (32.0 lb) Free chlorine level of 10 ppm, SDI upto 20 and conductivity of 2000 Micro-Siemens. Others: System should have auto diagnostic facility with Error & Alarm System should be supplied along with PREFILTRATION AND PREDISTILLATION UNIT to arrest particulate matters in the feed water Accessories: pH Control chemicals, sodium hypochlorite, Option turbidity meter, residual chlorine analyzer, Maintenance kit, Infusion pump alarm. Exchangeable</p>

		<p>Purification Cartridge capable to sustain bio film formation and Feeder. Anti-scaling compound for spent cartridges</p> <p>The Equipment should be compatible and have a low maintenance cost. Capable to produce specific quality water for different research needs.</p>
7	Automated protein purification system	<p>FEATURES</p> <ul style="list-style-type: none"> • Modular system design with a large range of options to allow flexibility in purification of proteins and peptides. • Customizable system that is easy to upgrade as your research needs develop. • Reliable system with components and integrated features. • Latest Licensed Software for providing simple, intuitive, and flexible total system control including drag-and-drop method creation. • Predefined method settings for all GE Healthcare lab-scale chromatography columns. <p>Minimum Dimensions(WxDxH): 53.5 × 63.0 × 47.0 cm (21 x 24.8 x 18.5 inches)</p> <p>Applications: Purification of Proteins, Peptides, and Nucleic Acids</p> <p>Wavelength Detection: Multiple (upto 3 wavelengths)</p> <p>UV Wavelength range: 190 to 700 nm</p> <p>Columns: HiTrap, HiScreen, HiPrep, HiLoad, Tricorn</p> <p>Flow Rate: 0.01 – 150 mL/minute (normal range) 0.01 – 300 mL / minute (column packing flow)</p> <p>Standard Components: System Pump, Mixer, Injection Valve, UV monitor, Conductivity monitor, Fraction collector, pH monitor (optional)</p> <p>Accessories: Valves for buffer selection, sample injection, gradient formation and flow diversion should be included into the system. Holders and clamps for attaching columns, flask and tubing's to the systems</p>
8	DNA Sequencer/ Analyzer	<p>Accuracy: 98% to 99.9%</p> <p>Read Length: 100 – 500 base pairs</p> <p>Maximum Reads: 1 M to 1400 M</p> <p>Maximum Output: 10 Mb to 600 GB</p> <p>Sample Throughput: High Throughput and can multiplex different number of samples</p> <p>CPU: 2 * Intel Xeon x5560 or equivalent</p> <p>Memory: 48 GB</p> <p>Hard Disk: 1 to 3 TB</p> <p>Other Device: eBot system or equivalent</p> <p>Time/Run: 1-10 days</p> <p>Applications:</p> <ul style="list-style-type: none"> - Whole Genome Sequencing (Small and Large) - Targeted Sequencing - Amplicon Sequencing - mRNA Sequencing - RNA Sequencing - Mutation detection - Cancer, Array
9	Gas Chromatograph - Mass Spectrometer (GC- MS)	<p>Mass Spectrometer:</p> <p>Ion Source: EI and CI (easily removable)</p> <p>Electron Energy: 10 to 200eV</p> <p>Electron Current: 5 to 250uA</p>

		<p>Filament: Dual, Automatic switching or single long life Mass Analyzer: Quadrupole with Pre-Rod</p> <p>Scan Rate: upto 20,000 u/sec (preferably of maximum value) Mass range: m/z 1.5 to 1200</p> <p>Detector: Electron Multiplier</p> <p>Vacuum System: Turbo Molecular pump should have approx. vacuum capacity of 350 liter / Sec (He or N2, preferably N2) or more</p> <p>EI/CI Scan range S/N: 1pg OFN m/z 272 S/N > 2000</p> <p>Gas Chromatogram:</p> <p>Column Oven Temp: 450°C</p> <p>Max Temp accuracy: set value(K)±1%</p> <p>Temp programing steps: 20</p> <p>Split/Splitless Injection unit Temp: 450°C Max</p> <p>Pressure setting Range: 0 to 970KPa</p> <p>Total Flow rate setting: 0 to 1200 ml/min</p> <p><u>Software:</u></p> <p>Measurement mode: Scan, SIM and Simultaneous Scan/SIM</p> <p>Measurement Instrument Tuning: Automatic</p> <p>Maintenance support: MS Navigator</p> <p>Licensed Data Base: NIST, Pesticides Library, Drug Library</p> <p><u>Auto Sampler/Auto injector:</u></p> <p>Sample volume: 0.1 to 8 µL, 0.1 µL steps using 10 µL syringe</p> <p>Number of samples: 1.5 ml sample vials: 150 vials or more</p> <p>Number of sample injection: 1 – 99 injection per sample</p> <p>Type of sample injection: Traditional, Solvent flush and solvent flush with second solvent</p> <p>Injection Volume Linearity: ±0.5%</p> <p>Cross Contamination: Less than 10⁻⁴</p> <p>Data Management System:</p> <p><u>Computer:</u> Must provide Licensed Software with a computer and printer.</p> <p>MS libraries: Must be able to search compounds from a chromatogram and use the information to construction quantization methods.</p> <p>Accessories: Separate columns for analysis of environmental, biological, fuel and food samples. BOC passed gas cylinders</p>
10	X-Ray Diffraction Spectrometer (XRD) with Thin Film Analysis Attachment	<p>X-Ray generator Control:</p> <p>Out Put : 3 KW</p> <p>Tube Voltage: 60KV Tube current: 80mA</p> <p>Tube voltage Step width: 1KV Tube current stepwidth: 1mA</p> <p>Tube Protection: Over Load, Overvoltage, over current, cooling water abnormalities.</p> <p>X-Ray Tube:</p> <ul style="list-style-type: none"> ▪ High tube power (up to 3 kW) ▪ High emission current (up to 60 mA) ▪ Various focus dimensions (LFF, FF, NF and BF) ▪ Various anode types (Cu, Co, Cr, Fe, Mo) Dual anode type with Cu and Co or Mo. <p>Detector: Silicon Micro-Strip detector based on Hybrid Photon Counting (HPC) technology</p>

		<p>Gonio meter: Type: Vertical Theta-2Theta, with independently driven ω and 2θ circles, capable to realize 3 different powder configurations (transmission mode, reflection mode and in-focus-diffraction mode) Radius of measuring circle: 140mm to 573mm (depending on selected configuration). Min step angle: 0.001°. Angular reproducibility: 0.0005°. Operation angle range: 10° to 130°(2 Theta) Operation system: - reflection Bragg-Brentano measurements in either 2θ-θ- or θ- 2θ- or θ- or -mode with divergent beam - Transmission/Debye-Scherrer mode, - In-focus mode with quasi-parallel beam characteristics set of different collimators depending on selected XRD geometry WATER CHILLER, PC BRANDED and color Laser Printer for above system must be provided. Others: ICDD PDF data base PDF 4+ 2019 full database with minimum of 5 years license. Capable to have no trouble shooting with samples containing iron.</p> <p>Applications</p> <p>XRD machine must fully support the following applications.</p> <ul style="list-style-type: none"> • Phase Identification {especially (but not limited to) Clay Mineral, Iron (Fe), Hematite and Magnetite identification} • Quantitative Analysis • Crystal structure determination • Pair Distribution Function (PDF) analysis • X-Ray Reflectometry (XRR) <p>Note: In case of supporting Optional application, please include the associated hardware and/or software as optional items in your quotation.</p>
11	Vibrating sample magneto-meter (VSM)	<ul style="list-style-type: none"> • Highest field Electromagnet based VSM, up to 3.5 Tesla • Sample space 3.5mm to 16mm • Temperature control option: N₂ gas 77K-573K and Ar 300K-1000K • High sensitivity (Resolution higher than 10⁻⁶ emu/rt-Hz) • 1 × 10⁻⁷ emu noise floor at 10 s/pt • 7.5 × 10⁻⁷ emu noise floor at 0.1 s/pt • High stability ±0.05% per day • Embedded Gauss Meter (Range: 30k Gauss to 1 Gauss) • Embedded Magnetic Flux Detector • Air Cooled Magnet Power Supply • Vector, magnetoresistance, and autorotation options • Associated Software for Collecting and Analyzing Data (Hysteresis loops can be measured automatically to find the saturation magnetization, coercively, and remanence of magnetic samples. Demagnetization process can be performed and measured automatically.)
12	Preparative HPLC with all accessories	<p>High Performance Liquid Chromatography: Solvent Management: Number of solvents: One to four Solvent conditioning: Vacuum degas, two operating modes, four chambers, < 500 μL internal volume per chamber.</p>

	<p>Flow rate range: 0.01 to 150.00 mL/min (0.050 to 5.000 mL/min typical) in 0.001 mL/min increments</p> <p>Compressibility compensation: Automatic and continuous</p> <p>System delay volume: <650 µL, independent of back pressure at 1 mL/min.</p> <p>Gradient profiles: 11 gradient curves (including linear, step [2], concave [4], and convex [4])</p> <p>Maximum operating pressure 5000 psi (345 bar) (0.010 to 3.000 mL/min) programmable upper and lower limits.</p> <p>Composition precision: ≤0.15% RSD or ≤0.02 min SD, whichever is greater, based on retention time (60:40 degassed methanol/water dial-a-mix, 1.00 mL/min, six replicates, phenome mix, 254 nm).</p> <p>Flow accuracy: ±1% or 10 µL/min, whichever is greater, 0.200 to 5.000 mL/min, (degassed methanol at 600 psi back pressure). Sample Management:</p> <p>Number of sample vials 120 vials, configured in five carousels of 24 vials each</p> <p>Number of sample injections 1 to 99 injections per sample vial.</p> <p>Injection volume range 0.1 to 100.0 µL, standard; 0.1 to 2000.0 µL, with optional sample loop</p> <p>Injector linearity >0.999 coefficient of deviation (1.000 to 100.000 µL). Uv/Vis Detector:</p> <p>Wavelength range 190 to 700 nm</p> <p>Wavelength accuracy ±1 nm Wavelength repeatability ±0.1 nm</p> <p>Bandwidth ≤8 nm</p> <p>Measurement range 0.0001 to 4.0000 AU Auto-sampler</p> <p>*Pressure limits: Should be Up to 6100 psi (428 bar)</p> <p>*Injection volume: Fixed Loop mode: 2 µL to 500 µL,</p> <p>*Injection Cycle Time: Should be as fast as 8 seconds in Partial *Fill mode or 35 seconds in µL Pickup mode</p> <p>*Loop volumes: Should be 2 µL to 5 mL, 100 µL standard</p> <p>*Injection repeatability: Fixed loop mode: 0.3% RSD</p> <p>Partial loop mode: 0.5% RSD for ≥5 µL injections</p> <p>1.0% RSD for 1-4 µL injections</p> <p>µL Pickup mode: 0.5% RSD for ≥5 µL injections</p> <p>1.5% RSD for 1 µL injection</p> <p>*Sample capacity: 2 x 96-well high (deep) and low (shallow) microtiter plates; 100 2 mL vials; 200 0.2 mL vials; 25 6 mL vials</p> <p>*Needle washes/flushes: Programmable: up to 9 each of pre- and post- injection and between-method needle washes/flushes. All washes are followed by air drying of needle via built-in air compressor.</p> <p>*Peltier temperature range: Cooling-Only: 4 °C to ambient – 3 °C (will reach 4 °C ±2 °C with ambient temperature up to 25°C at relative humidity of 80%).</p> <p>Cooling/Heating: 4 °C to 40 °C (will reach 4 °C ±2 °C with Injection start synchronized to start pump program)</p> <p>FRACTION COLLECTOR</p> <p>Software:</p> <p>Software should be latest Window operating system based. It should control full HPLC system.</p> <p>Communication should be on RS232 port/USB.</p> <p>It should has graphical method editing, for visual optimization of component names, ISTD and reference peak identification search windows component grouping, and data processing and calibration parameters.</p>
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		<p>It should have the facility to display component names, retention times, relay events, and baseline timed events in Graphic method editing.</p> <p>It should obtain average and %RSD value of summarized component Amounts, area heights, response factors.</p>
13	Fluorescent microscope	<p>Optical system: Universal optical system (infinity-corrected) or better</p> <p>Microscope frame</p> <p>Illumination: External light source, Light preset switch, LED voltage indicator Reflected/transmitted changeover switch</p> <p>Focus: Motorized focusing, Stroke 25 mm, Minimum graduation 0.01µm</p> <p>Max. Specimen height: 25-65 mm (w/o spacer)</p> <p>Observation tubes</p> <p>Widefield: Inverted trinocular,</p> <p>Super Widefield: Inverted: trinocular Erect: trinocular, tilting trinocular</p> <p>Reflected light Illumination</p> <p>BF etc. BX-RLAA Motorized BF/DF changeover Motorized AS</p> <p>Reflected Fluorescence: BX-RFAA Motorized 6 position turret Built-in motorized shutter With FS, AS</p> <p>Transmitted light</p> <p>100W halogen Abbe/long working distance condensers Built-in transmitted light filters (LBD, ND25,ND6)</p> <p>Revolving nosepiece</p> <p>For BF: Motorized sextuple</p> <p>For BF/DF: Motorized quintuple, motorized sextuple, centering quintuple</p> <p>Stages: Coaxial left (right) handle stage with torque adjustment Large-size coaxial left (right) handle stage with lock mechanism in Y axis</p> <p>Compatible CCD digital camera with following minimum specifications: <u>Microscope Digital Camera</u></p> <p>Camera type: Color / Monochrome 2CCD camera or Better Pixel shifting (only for color CCD) Cooling system: Peltier device (max. Ta -10 degree C) or Better</p> <p>Image sensor Size: [Color] 2/3 inch 1.45-4.45 mega pixels color CCD, RGB colors on chip filter [Monochrome] or Better CCD sensor with its "global shutter" design or better 1.45 mega pixels monochrome CCD or Better</p> <p>Live Frame Rate: 1200 x 1200 (1x1): 10-15 fps, or Better 600 x 600 (1x1) : 10-15 fps or Better 600 x 590 (2x2): 20-35 fps, or better 300 x 280 (4x4): 40-57 fps or better</p> <p>Scanning Mode: Progressive Scan</p> <p>Camera Mount: B4 mount (2/3 inch Bayonet mount) or better</p> <p>Exposure Control: Mode (Auto) or better</p>

		<p>Adjustment (± 2.0 EV step: 1/3 EV) or better Exposure Time (23 μs to 60 s) or better</p> <p>Metering Mode: Full image, 20-50%, 1-4%, 0.1-0.5% or better</p> <p>Binning: 2 x 2 and 4 x 4 or better</p> <p>With original Operating Software</p>
14	Uv/Vis NIR System	<p>Principle: Doublebeam, double monochromator, UV/Vis/NIR spectrophotometer. Optical System: Aberration corrected Czerny Turner monochromator. Detector: Photomultiplier Tube for UV/Vis range & InGaAs for NIR range. Source: Pre-aligned tungsten-halogen and deuterium & source doubling mirror for improved UV/Vis/NIR energy. Wavelength Range: 190 nm - 3300 nm Resolution: 0.1 nm Stray Light: At 200 nm: 10 g/L NaI = 0.00008% T max At 340nm: 50mg/L NaNO₂ = 0.00008% T max At 1420nm: H₂O 1cm pathlength = 0.0005%T At 2365 nm: CHCl₃ 1 cm path length \leq 0.00050 %T Wavelength Accuracy: UV/Vis \pm 0.1 nm, NIR \pm 0.600 nm Wavelength Reproducibility: UV/Vis (Deuterium lamp lines) \leq 0.010 nm NIR (Deuterium lamp lines) \leq 0.040 nm Standard deviation of 10 measurements UV/Vis: \leq 0.005nm Standard deviation of 10 measurements NIR: \leq 0.020 nm Photometric Accuracy: Double Aperture Method 1 A \pm 0.003 A Double Aperture Method 0.5 A \pm 0.0003 A NIST 1930D Filters 2 A \pm 0.0030 A NIST 930D Filters 1 A \pm 0.0030 A NIST 930D Filters 0.5 A \pm 0.0020 A K₂Cr₂O₇-Solution USP/DAP method \pm 0.0080 A Photometric Range: -2 to +6 Abs Band pass: 0.05 nm - 5.00 nm in 0.01 nm increments UV/Vis range 0.20 nm - 20.00 nm in 0.04 nm increments NIR range Integrating Sphere Attachment: Used for the measurement of diffuse and specular reflectance and Transmission of liquid and solid samples with full accessories Licensed Software Computer: Branded Computer with 19" LED Monitor with Printer.</p>
15	FT-IR with ATR	<p>Wavelength Range: 7800 - 350 cm⁻¹ proprietary KBr beam splitter, Resolution: 0.5 cm⁻¹ or Better Precision: Better than 0.01 cm⁻¹ Accuracy: 0.1 cm⁻¹ Signal-to-noise: 30,000:1 or Higher Optical System: Interferometer: Self-compensating for dynamic alignment, High stability, Rotary Michelson interferometer. Sealed interferometer with auto dryer</p>

	<p>Laser: Helium Neon Detector (standard): DLATGS/ High linearity room temperature detector. Beam splitter: Germanium coated KBr. Desiccant: Long-life, Typical lifetime 3 years at 25°C and 70% relative humidity. The system must have a software controlled desiccant status indicator for accurate monitoring the status of the desiccated area. Accessory recognition: Equipped with automatic accessory recognition mechanism. Sample Type for Analysis: Solid and Liquid. Licensed Software: Spectrum measurement, Continuous measurement, Atmospheric correction, Manipulation Functions, GLP/GMP support. System must be CFR part 11 Compliant, FT-IR spectral library. Branded PC and laser printer</p>
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SECTION-VI: SAMPLE FORMS

1. Bid Form
2. Firm Level Eligibility and Qualification Requirements Form
3. Product Level Mandatory Qualification Requirements Form
4. Technical Specification Compliance Form
5. Price Schedules
6. Bid Security Form
7. Contract Form
8. Performance Security Form
9. Bank Guarantee for Advance Payment
10. Manufacturer's Authorization Form
11. Integrity Pact

1. Bid Form

Date: _____

IFB No: _____

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

Gentlemen and/or Ladies:

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

We undertake, if our Bid is accepted, to deliver the goods in accordance with the delivery schedule specified in the Schedule of Requirements.

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

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

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

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

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

(if none, state "none")

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

Dated this _____ day of _____ 20_____.

signature]

[in the capacity of]

2. Firm Level Eligibility and Qualification Requirements Form

A. Mandatory Requirements:

S.No.	Requirement	Response of the Bidder	Documentary Evidence/ Page No.										
1	Brief Firm Profile i. Name of the Firm ii. Telephone and Fax Number of the Firm iii. Email Address of the Firm iv. Postal Address of the Firm v. Name/Designation of the Authorized Person vi. Contact Number of the Authorized Person vii. Email Address of the Authorized Person												
2	Name of Owner alongwith copy of CNIC												
3	Certificate of Firm Registration												
4	Active Income Taxpayer Status												
5	Active Sales Taxpayer Status												
6	Annual Turnover of at least double the bid value per year in the financial year 2016-17 and 2017-18												
7	At least five years' experience in supply and installation of similar equipment to government/semi-government/ private company/ department (Documentary Proof in form of Work Order/Satisfactory Report must be attached). Detail as per following proforma be attached: The bidders should fill the table given below as mandatory requirement.												
	<table border="1"> <thead> <tr> <th>S.No.</th> <th>Name of Customer</th> <th>Name and Number of Equipment</th> <th>Amount</th> <th>Year of Job</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	S.No.	Name of Customer	Name and Number of Equipment	Amount	Year of Job							
S.No.	Name of Customer	Name and Number of Equipment	Amount	Year of Job									
8	Undertaking on judicial stamp paper of Rs.100/- that the firm is not blacklisted by any of Provincial or Federal Government Departments, Agencies, Organizations or autonomous bodies or Private Sector Organizations anywhere in Pakistan.												
9	Upon request, bidder must arrange onsite visit where the solution is deployed												
10	A Certificate on Firm Letterhead that CDR @ 2% of bid cost is attached with Financial Proposal. CDR No., issuing date, and name of issuing bank and branch, shall be mentioned in the Certificate												

B. Scoring Requirement/Criteria: At least 70% marks shall be obtained to Technically Qualify and to participate in the bid:

S.No	Criteria List	Description	Max. Marks	Response of Bidder w.r.t Criteria	Documentary Evidence/ Page No.
1	Firm's years of service	Minimum 5 Years (Mandatory); 1 mark for each year beyond 5 years	10		
2	Supply and Installation of of Hi-Tech Lab Equipment worth more than Rs.1.0 Million each completed since 1st July 2015	- - 1 mark for each 2 million order; - 2 marks for each 4 million order; - 3 marks for each 6 million order, - 4 marks for each 8 million and above order;	20		
3	Supply and Installation of of Hi-Tech Lab Equipment worth more than Rs.1.0 Million each in-hand at the moment	- - - 1 mark for each 2 million order; - 2 marks for each 4 million order; - 3 marks for each 6 million order, - 4 marks for each 8 million and above order;	20		
4	Qualified Engineers employed in the firm since at least last 2 years	2 marks for each qualified engineer	10		
5	Qualified DAE holder employed in the firm since at least last 2 years	1 mark for each qualified DAE holder	10		
6	Support Offices within the Country with the capability to provide prompt services at the UoP	2 marks for each city	10		
Total Marks			80		

3. Product Level Mandatory Qualification Requirements Form

S.No.	Name of Equipment	Bidder has quoted the equipment (Yes/No)	Make and Model of Quoted Equipment	Country of Origin	Year when manufacturing of the quoted model has commenced (Only latest Models compliant with the speciation shall be quoted)	Dealership Certificate attached (Yes/No) ¹	Manufacturer Authorization Letter ² (Yes/No)	Availability of Factory Trained Engineer ³
1	Power Lab with Organ Bath							
2	Fluorescence Spectrometer							
3	UV-visible Diffuse Reflectance Spectrophotometer							
4	Real time PCR							
5	TPR/TPD Lab							
6	Water purification system							
7	Automated protein purification system							
8	DNA Sequencer/Analyzer							
9	Gas Chromatograph - Mass Spectrometer (GC-MS)							
10	XRD with Thin Film Analysis Attachment							
11	Vibrating sample magnetometer (VSM)							
12	Preparative HPLC with all accessories							
13	Fluorescent microscope							
14	Uv/Vis NIR System							
15	FT-IR with ATR							

¹ Dealership Certificate from the Manufacturer.

² Manufacturer Authorization Letter for participating in this bid (as per specimen prescribed in the bidding document)

³ Number and Name of Qualified Engineers trained by the Manufacturer to install/maintain the quoted equipment.

4. Technical Specification Compliance Form

[Pursuant to ITB 14.3(c)]

1. There is a separate Technical Specification Compliance Form for each equipment.
2. The bidder shall duly fill, sign, and stamp the form for each equipment for which it is submitting a price quote.
3. The duly filled Technical Specification Compliance Form shall be submitted with Technical Proposal.
4. The Technical Proposal submitted without duly filled Technical Specification Compliance Form shall be considered as 'nonresponsive'.

UNIVERSITY OF PESHAWAR
Procurement of ARL Equipment - ITB No. 05/UoP/MP-IV/ARL
TECHNICAL SPECIFICATION COMPLIANCE FORM

UoP Requirement/Specification as per Bidding Document		Response of Bidder		
S.No.	Item/Part Name	Required Specification	Quoted Model/Specification	100% Compliance (Yes/No)/ Commentary
1	Item Type	Power Lab with Organ Bath		
	Brand Name and Model No.	International Brand		
	Multi-Channel Power Lab	Minimum Four Channels		
	Data Acquisition Systems /Recording Systems	· A dual Bio Amp, isolated stimulator, trigger input & independent analog outputs. <ul style="list-style-type: none"> • LabChart Teaching Suite. • LabTutor for new installation. • Bio Amp Cable, Smart Adapter. • USB interface for connection to Windows and computers and has an aggregate sampling rate of upto 100k samples per channel. 		
	Bridge amplifier	For amplification of signals received from transducers		
	Force Transducer	(5mg -25 g) with a resolution of 2 mg.		
	Isotonic Transducer	Transducers: High Grade Isotonic Transducer		
	Desktop computer system	Labchart for recording the changes in tension of isolated tissues. <ul style="list-style-type: none"> • Dose Response software for analysis of dose response measurements and other software for analysis of tissue data. 		
	Digital Precise Circulation Water Bath	Digital Precise Circulation Water Bath		
	Thermocirculator	For regulation of temperature and circulation to organ baths		
	Measuring graduated Jugs	For preparation of solutions		
	Clamps	For Support		
Micropipette	Adjustable Individually Calibrate, Fully Autoclaveable (10-100 uL, 100-1000 uL, 1000-5000 uL)			

Micropipette tips	Micropipette tips		
Thermometer	Temperature Measurement		
Carbogen/Oxygen Cylinder	For tissue aeration		
Steel rods and stainless steel hooks	For support to isolated tissues and gas supply		
Reservoir bottles (1.5L)	1.5 L for physiological salt solutions		
Drainage pipes	For supply and draining of solutions		
Heating lamp	Heating lamp		
Surgical tools	Surgical tools		
Power connections cords (USB and Power Cables)	Power connections cords (USB cables and Power Cables)		
Brushes, loops, plastisin, needles etc.	Brushes, loops, plastisin, needles etc.		
Tissue organ bath	<ul style="list-style-type: none"> • Students Organ Bath with 25 ml ~ 50 ml tissue baths (four baths) with leak proof joints, having fine thermostatic temperature control, • Temperature Display • Temperature Range: Room Temperature to 50°C ± 0.1°C Temperature Stability in the whole water heat tank • Power supply: 110-240 V. • Stainless Steel Oxygen tube • Flow and Drain System • Fully compatible with power lab system Accessories including dust cover cloth & brushes, power cord, spare bulb, spare fuses, frog board		
Make	Japan, US, Europe or Equivalent		
Warranty	1-year Warranty including power fluctuation coverage		
Price List of Spare Parts attached	Price List of Spare and Consumable Parts is attached mandatorily		

Certificate by the Bidder:

It is Certified that above quoted specification for the Power Lab with Organ Bath is complete in all respects (Hardware, Software, Accessories etc.) and the Equipment does not require any additional Hardware/Software/Accessories to perform its functions/tests.

Name of Bidder: _____

Stamp and Signature: _____

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S.No.	UoP Requirement/Specification as per Bidding Document		Response of Bidder	
	Item/Part Name	Required Specification	Quoted Model/Specification	100% Compliance (Yes/No)/ Commentary
2	Item Type	Fluorescence Spectrometer		
	Brand Name and Model No.	International Brand		
	Detection modes	UV-Vis absorbance, Fluorescence intensity, Luminescence, Fluorescence polarization		
	Source	Xenon Flash Lamp		
	Detector	Silicon Diode		
	Optics	Monochromator should cover the following ranges: Excitation 200-800 nm with zero order selectable, Emission 200-650 nm with zero order selectable 200-900 nm with zero order selectable		
	Wavelength Accuracy	(±1 nm) Wavelength:(±0.5 nm)		
	Reproducibility Spectral band pass	The excitation slits and emission slits should be varied and selected in 10 nm band pass.		
	Scanning Speed	10-1500 nm/minute with increment of 1 nm		
	Sensitivity	At 350 nm, should be 500: 1 RMS measuring noise on the Raman peak, and should be 2000: 1 RMS measuring noise on the baseline.		
	Standard sample	Should be a single position water thermostatic holder for 10 nm cuvettes.		
	Computer controlled	Yes		
Data acquisition	Instrumental parameters should be controlled by software Computer, Printer			

Accessories	Other requisite accessories including one spare Xeon Lamp and 10 Sample Cells (Quartz)		
Make	Japan, US, Europe or Equivalent		
Warranty	1-year Warranty including power fluctuation coverage		
Price List of Spare Parts attached	Price List of Spare and Consumable Parts is attached mandatorily		

Certificate by the Bidder:

It is Certified that above quoted specification for the Fluorescence Spectrometer is complete in all respects (Hardware, Software, Accessories etc.) and the Equipment does not require any additional Hardware/Software/Accessories to perform its functions/tests.

Name of bidder: _____

Stamp and Signature: _____

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TECHNICAL SPECIFICATION COMPLIANCE FORM

S.No.	UoP Requirement/Specification as per Bidding Document		Response of Bidder	
	Item/Part Name	Required Specification	Quoted Model/Specification	100% Compliance (Yes/No)/ Commentary
3	Item Type	UV-visible Diffuse Reflectance Spectrophotometer (190-1100 nm)		
	Brand Name and Model No.	International Brand		
	UV/Vis Spectrometer Compact Size	Diffuse Reflectance/Transmittance with printing and built-in data processing options		
	Wavelength Range	190-1100 nm (designs with wavelength expansion kit to extend the measurement wavelength range will be preferred)		
	Spectral Bandwidth	0.5, 1, 2, 5, 20 nm		
	Detector	Si diodes, high sensitivity		
	Sample and Reference Source Lamp	Tungsten / Deuterium		
	Wavelength Accuracy	±0.1 nm at D2 peak @ 656.1 nm, +/- 0.3 nm for full range.		
	Wavelength Reproducibility	±0.1 nm		
	Photometric Accuracy	+/- 0.002A (0-.5 Abs), +/- 0.004A (.5-1 Abs)		
	Photometric Reproducibility	+/-0.001 Abs @ 0.5 Abs Stray light: < 1.0% (198 nm KCL), <0.02% (220 nm NaI), <0.02% (340 nm NaNO2)		
	Photometric Noise	< 0.00005 Abs (at 700 nm, RMS)		
	Baseline Flatness	+/- 0.0005 Abs (After one hour warm-up)		
	Baseline Stability	< 0.0003 Abs/h (700nm, after One hour warm up		
	Maximum Scan Rate	3000 nm/min		
Maximum Slew Rate	8000 nm/min			

Signal to Noise Ratio	Extremely high signal to noise ratio		
Cell holder for Gas, Liquid & Powder Samples	At least three sets of each		
Computer	Branded Computer with 19" LED Monitor Printer: HP LaserJet Printer 1102 or equivalent		
Soft Wares	Licensed complete software for instrument, accessory control, and data analysis.		
Versatility	Ideal for use in biotechnology, environmental, genetics, manufacturing, pharmaceutical QA/QC and academic labs		
Accessories	All requisite accessories		
Make	Japan, US, Europe or Equivalent		
Warranty	1-year Warranty including power fluctuation coverage		
Price List of Spare Parts attached	Price List of Spare and Consumable Parts is attached mandatorily		

Certificate by the Bidder:

It is Certified that above quoted specification for the UV-visible Diffuse Reflectance Spectrophotometer (190-1100 nm) is complete in all respects (Hardware, Software, Accessories etc.) and the Equipment does not require any additional Hardware/Software/Accessories to perform its functions/tests.

Name of Bidder: _____

Stamp and Signature: _____

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TECHNICAL SPECIFICATION COMPLIANCE FORM

UoP Requirement/Specification as per Bidding Document		Response of Bidder		
S.No.	Item/Part Name	Required Specification	Quoted Model/Specification	100% Compliance (Yes/No)/ Commentary
4	Item Type	Real Time PCR		
	Brand Name and Model No.	International Brand		
	Thermal Cycling System:	Peltier-based, 96 – 120 well block		
	Optical System	Multiple Led filters and Diode or led camera with halogen lamp excitation; at least five excitation and five emission filters or better		
	Reaction Volumes	5–30 µL, 10–100 µL.		
	Sample Format	Fast 96-well plates optimized for 10 µL reactions.		
	Peak Block Heating Rate	5.5°C.		
	Temperature Range	4–100°C.		
	Temperature Accuracy	+/- 0.25°C of setpoint/display temperature, measured at 3 minutes after clock start.		
	Temperature Uniformity	+/- 0.50°C, 30 seconds after clock start.		
	Software Specifications	Quantification with standard curve, Comparative Ct, melt curve analysis, Relative Standard Curve, Allelic Discrimination, Plus/Minus Dye Discrimination Multicomponenting algorithm, end point analysis		
Multiplate Data Comparison	Compare an unlimited number plates of gene expression assays Multiplex Capability Multiplex up to five targets per well.			

The equipment shall be Calibrated with following Registered Dyes at Installation	FAMTM /SYBR Green, VIC /JOETM, NEDTM /TAMRATM /Cy3, ROX TM /Texas Red, and Cy5.		
Make	Japan, US, Europe or Equivalent		
Warranty	1-year Warranty including power fluctuation coverage		
Price List of Spare Parts attached	Price List of Spare and Consumable Parts is attached mandatorily		

Certificate by the Bidder:

It is Certified that above quoted specification for the Real Time PCR is complete in all respects (Hardware, Software, Accessories etc.) and the Equipment does not require any additional Hardware/Software/Accessories to perform its functions/tests.

Name of Bidder: _____

Stamp and Signature: _____

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UoP Requirement/Specification as per Bidding Document		Response of Bidder		
S.No.	Item/Part Name	Required Specification	Quoted Model/Specification	100% Compliance (Yes/No)/ Commentary
5	Item Type	TPR TPD Lab		
	Brand Name and Model No.	International Brand		
	Capability	BET Surface Area, Pulse Titration (metal area) TPR, TPO, TPD		
	Accessories Features	Injection Loop, Calibration Port, Quartz Glassware, Self-sealing Sample Cell, Holders, Stainless-Steel Plumbing, Multiple-Gas Selector Valve, Variable Gas Flow, Rate Control, Sample Cell Bypass, In-Line Cold Trap with Bypass, User Adjustable Detector Sensitivity, Multi-Function Display, Built-In Peak Area Integrator High Temperature 450°C, Heating Mantle High Temperature 1100oC, Furnace Heating Rate 1 to 20 deg/min 1000°C to 1100°C, PID Programmable Controller, In-Situ Sample, Thermocouple, Data Acquisition, Interface & Software, Mass Flow Controller/Gas Blender option.		
Hardware	Thermal Conductivity Dual-Filament, Detector Diffusion Type, TCD Filaments Oxidation and, Ammonia Resistant, Filament Current Adjustable, Continuously Variable Sensitivity, Dynamic Range: 512, Gas Input Ports5, Loop Volumes Supplied 50, 100, 250 µL (others available), Heating Mantle, Max temp 450°C, Mantle Power 125 W, Set-point Controller 1 degree increments Furnace, Max Temp 1100°C Furnace Power 575 W, Controller Type Full PID, programmable Controller Tuning Automatic Programme Steps Ramps, Hold (Soak) Ramp Types Rate, Time Furnace Heating Rate, 1 to 100 deg/min up to 500°C Furnace Heating Rate, 1 to 50 deg/min 500°C to 750°C			

	Furnace Heating Rate 1 to 30 deg/min 750°C to 1000°C Furnace Heating Rate 1 to 20 deg/min 1000°C to 1100°C		
Performance	Volume Adsorbed 0.001 to >100cm ³ Specific Volume 0.0001 cm ³ /g Total Surface Area 0.1 to 280 m ² Specific Surface Area 0.01 m ² /g to upper limit set only by weighing accuracy of smallest sample Pore Volume 0.0001 to 0.15 cm ³ Accuracy, Volume ± 1%, Reproducibility 0.5% Gases Compatibility: H ₂ , O ₂ , CO, CO ₂ , N ₂ O, SO ₂ , NH ₃ , N ₂ , Ar, Kr, He, any other		
Input Pressure (gauge)	70-140 kPa		
Gas Lines	5 x 1.5m 1/8" s.s. (supplied)		
Vent	Hose Barb Connector		
Electrical Voltage	100 - 240 VAC, Frequency: 50/60 Hz.		
Accessories	Reference Materials, Gas Regulator Assembly, Rotary Micro Riffler, Gas Blender (Mass Flow Controller)		
Make	Japan, US, Europe or Equivalent		
Warranty	1-year Warranty including power fluctuation coverage		
Price List of Spare Parts attached	Price List of Spare and Consumable Parts is attached mandatorily		

Certificate by the Bidder:

It is Certified that above quoted specification for the TPR TPD Lab is complete in all respects (Hardware, Software, Accessories etc.) and the Equipment does not require any additional Hardware/Software/Accessories to perform its functions/tests.

Name of Bidder: _____

Stamp and Signature: _____

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TECHNICAL SPECIFICATION COMPLIANCE FORM

UoP Requirement/Specification as per Bidding Document		Response of Bidder		
S.No.	Item/Part Name	Required Specification	Quoted Model/Specification	100% Compliance (Yes/No)/ Commentary
6	Item Type	Water Purification System		
	Brand Name and Model No.	International Brand		
	Capacity	The amount of treated water: 20 L		
	Membrane Module	Ultra filtration polymeric membrane (Poly Sulfone). Also, have ion exchange resins options.		
	Infusion Pump	3 Sets		
	Flow Rate	20 lit / hour		
	UV Lamp	The generated water should be treated with UV to destroy bacteria through a vertically placed dual wavelength (185 & 254nm) cathode, UV lamp with ballast and quartz sleeve placed in an electro polished housing.		
	Calibration Meters	Should have digital calibrated meters for continuous monitoring and display of water quality parameter		
	Activation	Activatable with fast flush and air purge		
	Safety	Should meet internationally recognized safety norms		

Product/Analytical grade water should have	Inorganic/Resistivity: 18.2 MΩ-cm TOC: <1 ppb Bacteria: <0.1 CFU/ml Bacterial endotoxin: <0.1 CFU/ml pH: Effectively neutral Conductivity: <5 mS/cm Free Chlorine: <0.05ppm, Carbon Dioxide: <1ppm Sodium: (ppb)< 1 Chloride: (ppb) < 1 Total Silica: (ppb) < 3		
Feed water tolerances	Temperature: 1 to 40°C Feed water Pressure: flooded suction (1psi/0.07 Bar) to 10psi/0.7bar Weight: 14.5kg (32.0 lb) Free chlorine level of 10 ppm, SDI upto 20 and conductivity of 2000 Siemens.		
Others	System should have auto diagnostic facility with Error & Alarm System should be supplied along with PREFILTRATION AND PREDISTILLATION UNIT to arrest particulate matters in the feed water		
Accessories:	pH Control chemicals, sodium hypochlorite, Option turbidity meter, residual chlorine analyzer, Maintenance kit, Infusion pump alarm. Exchangeable Purification Cartridge capable to sustain bio film formation and Feeder. Anti-scaling compound for spent cartridges. The Equipment should be compatible and have a low maintenance cost. Capable to produce specific quality water for different research needs.		
Make	Japan, US, Europe or Equivalent		
Warranty	1-year Warranty including power fluctuation coverage		

Price List of Spare Parts attached	Price List of Spare and Consumable Parts is attached mandatorily		
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Certificate by the Bidder:

It is Certified that above quoted specification for the Water Purification System is complete in all respects (Hardware, Software, Accessories etc.) and the Equipment does not require any additional Hardware/Software/Accessories to perform its functions/tests.

Name of Bidder: _____

Stamp and Signature: _____

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TECHNICAL SPECIFICATION COMPLIANCE FORM

UoP Requirement/Specification as per Bidding Document		Response of Bidder		
S.No.	Item/Part Name	Required Specification	Quoted Model/Specification	100% Compliance (Yes/No)/ Commentary
7	Item Type	Automated Protein Purification System		
	Brand Name and Model No.	International Brand		
	FEATURES	<ul style="list-style-type: none"> • Modular system design with a large range of options to allow flexibility in purification of proteins and peptides. • Customizable system that is easy to upgrade as your research needs develop. • Reliable system with components and integrated features. • Latest Licensed Software for providing simple, intuitive, and flexible total system control including drag-and-drop method creation. • Predefined method settings for all GE Healthcare lab-scale chromatography columns. 		
	Minimum Dimensions(WxDxH)	53.5 × 63.0 × 47.0 cm (21 x 24.8 x 18.5 inches)		
	Applications	Purification of Proteins, Peptides, and Nucleic Acids		
	Wavelength Detection	Multiple (upto 3 wavelengths)		
	UV Wavelength Range	190 to 700 nm		
	Columns	HiTrap, HiScreen, HiPrep, HiLoad, Tricorn		
Flow Rate	0.01 – 150 mL/minute (normal range) 0.01 – 300 mL / minute (column packing flow)			

Standard Components	System Pump, Mixer, Injection Valve, UV monitor, Conductivity monitor, Fraction collector, pH monitor (optional)		
Accessories	Valves for buffer selection, sample injection, gradient formation and flow diversion should be included into the system. Holders and clamps for attaching columns, flask and tubing's to the systems		
Make	Japan, US, Europe or Equivalent		
Warranty	1-year Warranty including power fluctuation coverage		
Price List of Spare Parts attached	Price List of Spare and Consumable Parts is attached mandatorily		

Certificate by the Bidder:

It is Certified that above quoted specification for the Automated Protein Purification System is complete in all respects (Hardware, Software, Accessories etc.) and the Equipment does not require any additional Hardware/Software/Accessories to perform its functions/tests.

Name of Bidder: _____

Stamp and Signature: _____

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Procurement of ARL Equipment - ITB No. 05/UoP/MP-IV/ARL

TECHNICAL SPECIFICATION COMPLIANCE FORM

UoP Requirement/Specification as per Bidding Document		Response of Bidder		
S.No.	Item/Part Name	Required Specification	Quoted Model/Specification	100% Compliance (Yes/No)/ Commentary
8	Item Type	DNA Sequencer/Analyzer		
	Brand Name and Model No.	International Brand		
	Accuracy:	98% to 99.9%		
	Read Length:	100 – 500 base pairs		
	Maximum Reads:	1 M to 1400 M		
	Maximum Output:	10 Mb to 600 GB		
	Sample Throughput:	High Throughput and can multiplex different number of samples		
	CPU:	2 * Intel Xeon x5560 or equivalent		
	Memory:	48 GB		
	Hard Disk:	1 to 3 TB		
	Other Device:	eBot system or equivalent		
	Time/Run	1-10 days		
	Applications	<ul style="list-style-type: none"> - Whole Genome Sequencing (Small and Large) - Targeted Sequencing - Amplicon Sequencing - mRNA Sequencing - RNA Sequencing - Mutation detection - Cancer, Array 		
Make	Japan, US, Europe or Equivalent			
Warranty	1-year Warranty including power fluctuation coverage			

Price List of Spare Parts attached	Price List of Spare and Consumable Parts is attached mandatorily		
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Certificate by the Bidder:

It is Certified that above quoted specification for the DNA Sequencer/Analyzer is complete in all respects (Hardware, Software, Accessories etc.) and the Equipment does not require any additional Hardware/Software/Accessories to perform its functions/tests.

Name of Bidder: _____

Stamp and Signature: _____

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Procurement of ARL Equipment - ITB No. 05/UoP/MP-IV/ARL

TECHNICAL SPECIFICATION COMPLIANCE FORM

UoP Requirement/Specification as per Bidding Document		Response of Bidder		
S.No.	Item/Part Name	Required Specification	Quoted Model/Specification	100% Compliance (Yes/No)/ Commentary
9	Item Type	Gas Chromatograph - Mass Spectrometer (GC-MS)		
	Brand Name and Model No.	International Brand		
	Mass Spectrometer			
	Ion Source	EI and CI (Easily Removable)		
	Electron Energy	10 to 200eV		
	Electron Current	5 to 250uA		
	Filament	Dual, Automatic switching or Single long life		
	Mass Analyzer	Quadrupole with Pre-Rod		
	Scan Rate	20,000 u/sec		
	Mass Range	m/z 1.5 to 1200		
	Detector	Electron Multiplier		
	Vacuum System	Turbo Molecular pump should have approx. Vacuum capacity of 350 liter / Sec (He or N2, preferably N2) or more		
	EI/CI Scan Range S/N	1pg OFN m/z 272 S/N > 2000		
	Gas Chromatogram			
	Colum Oven Temp	450°C Max		
	Temp Accuracy	Set value(K)±1%		
	Temp Programing Steps	20		
Split/Splitless Injection unit Temp	450°C Max			
Pressure setting Range	0 to 970KPa			

Total Flow rate setting	0 to 1200 ml/min		
Software:			
Measurement Mode	Scan, SIM and Simultaneous Scan/SIM Measurement		
Instrument Tuning	Automatic		
maintenance Support	MS Navigator		
Licensed Data Base	NIST, Pesticides Library, Drug Library		
Auto Sampler/Auto injector:			
Sample Volume	0.1 to 8 µL, 0.1 µL steps using 10 µL syringe		
Number of Samples	1.5 ml sample vials: 150 vials or more		
Number of Samples Injection	1 – 99 injection per sample		
Type of Sample Injection	Traditional, Solvent flush and solvent flush with second solvent		
Injection Volume Linearity	±0.5%		
Cross Contamination	Less than 10 ⁻⁴		
Data Management System			
Computer	Must provide Licensed Software with a computer and printer.		
Software	MS libraries: Must be able to search compounds from a chromatogram and use the information to construction quantization methods.		
Accessories	Separate columns for analysis of environmental, biological, fuel and food samples. BOC passed Gas Cylinders		
Make	Japan, US, Europe or Equivalent		
Warranty	1-year Warranty including power fluctuation coverage		
Price List of Spare Parts attached	Price List of Spare and Consumable Parts is attached mandatorily		

Certificate by the Bidder:

It is Certified that above quoted specification for the Gas Chromatograph - Mass Spectrometer (GC- MS) is complete in all respects (Hardware, Software, Accessories etc.) and the Equipment does not require any additional Hardware/Software/Accessories to perform its functions/tests.

Name of Bidder: _____

Stamp and Signature: _____

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Procurement of ARL Equipment - ITB No. 05/UoP/MP-IV/ARL

TECHNICAL SPECIFICATION COMPLIANCE FORM

UoP Requirement/Specification as per Bidding Document		Response of Bidder		
S.No.	Item/Part Name	Required Specification	Quoted Model/Specification	100% Compliance (Yes/No)/ Commentary
10	Item Type	X-Ray Diffraction Spectrometer (XRD) with Thin Film Analysis Attachment		
	Brand Name and Model No.	International Brand		
	X-Ray generator Control			
	Out Put	3 KW		
	Tube Voltage	60KV		
	Tube Current	80mA		
	Tube Voltage Step Width	1KV		
	Tube Current Step Width	1mA		
	Tube Protection	Over Load, Overvoltage, over current, cooling water Abnormalities.		
	X-Ray Tube	<ul style="list-style-type: none"> ▪ High tube power (up to 3 kW) ▪ High emission current (up to 60 mA) ▪ Various focus dimensions (LFF, FF, NF and BF) ▪ Various anode types (Cu, Co, Cr, Fe, Mo) Dual anode type with Cu and Co or Mo 		
	Detector:	Silicon Micro-Strip detector based on Hybrid Photon Counting (HPC) technology.		
	Gonio Meter			
		Type: Vertical theta –Theta 2Theta, with independently driven ω and 2θ circles, capable to realize 3 different powder configurations (transmission mode, reflection mode and in-		

	<p>focus-diffraction mode) Radius of measuring circle: 140mm to 573mm (depending on selected configuration). Min step angle: 0.001°. Angular reproducibility: 0.0005°. Operation angle range: 10° to 130°(2 Theta) Operation system: - reflection Bragg-Brentano measurements in either 2θ-θ- or θ- 2θ- or θ- or -mode with divergent beam - Transmission/Debye-Scherrer mode, - In-focus mode with quasi-parallel beam characteristics set of different collimators depending on selected XRD geometry</p>		
	<p>WATER CHILLER, PC BRANDED and color Laser Printer for above system must be provided.</p>		
Others	<p>ICDD PDF data base PDF 4+ 2019 full database with minimum of 5 years license. Capable to have no trouble shooting with samples containing iron.</p>		
Application	<p>XRD Machine must fully support the following application. Phase identification especially (but no limit to) clay Mineral, Iron (Fe), Hematite and Magnetite Identification}</p> <ul style="list-style-type: none"> • Quantitative Analysis • Crystal structure determination • Pair Distribution Function (PDF) analysis • X-Ray Reflectometry (XRR) 		

	Note: In case of supporting Optional application, please include the associated hardware and/or software as optional items in your quotation.		
Make	Japan, US, Europe or Equivalent		
Warranty	1-year Warranty including power fluctuation coverage		
Price List of Spare Parts attached	Price List of Spare and Consumable Parts is attached mandatorily		

Certificate by the Bidder:

It is Certified that above quoted specification for the X-Ray Diffraction Spectrometer (XRD) with Thin Film Analysis Attachment is complete in all respects (Hardware, Software, Accessories etc.) and the Equipment does not require any additional Hardware/Software/Accessories to perform its functions/tests.

Name of Bidder: _____

Stamp and Signature: _____

UNIVERSITY OF PESHAWAR
Procurement of ARL Equipment - ITB No. 05/UoP/MP-IV/ARL

TECHNICAL SPECIFICATION COMPLIANCE FORM

UoP Requirement/Specification as per Bidding Document		Response of Bidder		
S.No.	Item/Part Name	Required Specification	Quoted Model/Specification	100% Compliance (Yes/No)/ Commentary
11	Item Type	Vibrating sample magneto-meter (VSM)		
	Brand Name and Model No.	International Brand		
		<ul style="list-style-type: none"> • Highest field Electromagnet based VSM, up to 3.5 Tesla. • Sample space 3.5mm to 16mm • Temperature control option: N₂ gas 77K-573K and Ar 300K-1000K • High sensitivity (Resolution higher than 10⁻⁶ emu/rt-Hz) • 1 × 10⁻⁷ emu noise floor at 10 s/pt • 7.5 × 10⁻⁷ emu noise floor at 0.1 s/pt • High stability ±0.05% per day • Embedded Gauss Meter (Range: 30k Gauss to 1 Gauss) • Embedded Magnetic Flux Detector • Air Cooled Magnet Power Supply • Vector, magnetoresistance, and autorotation options • Associated Software for Collecting and Analyzing Data (Hysteresis loops can be measured automatically to find the saturation magnetization, coercivity, and remanence of magnetic samples. Demagnetization process can be performed and measured automatically.) 		

	Make	Japan, US, Europe or Equivalent		
	Warranty	1-year Warranty including power fluctuation coverage		
	Price List of Spare Parts attached	Price List of Spare and Consumable Parts is attached mandatorily		

Certificate by the Bidder:

It is Certified that above quoted specification for the Vibrating sample magneto-meter (VSM) is complete in all respects (Hardware, Software, Accessories etc.) and the Equipment does not require any additional Hardware/Software/Accessories to perform its functions/tests.

Name of Bidder: _____

Stamp and Signature: _____

UNIVERSITY OF PESHAWAR
Procurement of ARL Equipment - ITB No. 05/UoP/MP-IV/ARL

TECHNICAL SPECIFICATION COMPLIANCE FORM

UoP Requirement/Specification as per Bidding Document		Response of Bidder		
S.No.	Item/Part Name	Required Specification	Quoted Model/Specification	100% Compliance (Yes/No)/ Commentary
12	Item Type	Preparative HPLC with all Accessories		
	Brand Name and Model No.	International Brand		
	Solvent Management			
	Number of solvents	One to four		
	Solvent conditioning	Vacuum degas, two operating modes, four chambers, < 500 µL internal volume per chamber.		
	Flow Rate Range	0.01 to 150.00 mL/min (0.050 to 5.000 mL/min typical) in 0.001 mL/min increments		
	Compressibility Compensation	Automatic and continuous		
	System Delay Volume	<650 µL, independent of back pressure at 1 mL/min.		
	Gradient Profiles	11 gradient curves (including linear, step [2], concave [4], and convex [4])		
		Maximum operating pressure 5000 psi (345 bar) (0.010 to 3.000 mL/min) programmable upper and lower limits.		
	Composition Precision	≤0.15% RSD or ≤0.02 min SD, whichever is greater, based on retention time (60:40 degassed)		
		methanol/water dial-a-mix, 1.00 mL/min, six replicates, phenome mix, 254 nm). Flow accuracy: ±1% or 10 µL/min, whichever is greater, 0.200 to 5.000 mL/min, (degassed methanol at 600 psi back pressure).		

Sample Management	Number of sample vials 120 vials, configured in five carousels of 24 vials each Number of sample injections 1 to 99 injections per sample vial. Injection volume range 0.1 to 100.0 μ L, standard; 0.1 to 2000.0 μ L, with optional sample loop Injector linearity >0.999 coefficient of deviation (1.000 to 100.000 μ L).		
Uv/Vis Detector	Wavelength range 190 to 700 nm		
	Wavelength accuracy \pm 1 nm Wavelength repeatability \pm 0.1 nm		
	Bandwidth \leq 8 nm		
	Measurement range 0.0001 to 4.0000 AU Auto-sampler		
	*Pressure limits: Should be Up to 6100 psi (428 bar)		
	*Injection volume: Fixed Loop mode: 2 μ L to 500 μ L,		
	*Injection Cycle Time: Should be as fast as 8 seconds in Partial *Fill mode or 35 seconds in μ L Pickup mode		
	*Loop volumes: Should be 2 μ L to 5 mL, 100 μ L standard		
	*Injection repeatability: Fixed loop mode: 0.3% RSD Partial loop mode: 0.5% RSD for \geq 5 μ L injections 1.0% RSD for 1-4 μ L injections		
	μ L Pickup mode: 0.5% RSD for \geq 5 μ L injections 1.5% RSD for 1 μ L injection		
	*Sample capacity: 2 x 96-well high (deep) and low (shallow) microtiter plates; 100 2 mL vials; 200 0.2 mL vials; 25 6 mL vials		
	*Needle washes/flushes: Programmable: up to 9 each of pre- and post- injection and between-method needle washes/flushes. All washes are followed by air drying of needle via built-in air compressor.		
	*Peltier temperature range: Cooling-Only: 4 $^{\circ}$ C to ambient – 3 $^{\circ}$ C (will reach 4 $^{\circ}$ C \pm 2		

	°C with ambient temperature up to 25°C at relative humidity of 80%). Cooling/Heating: 4 °C to 40 °C (will reach 4 °C ±2 °C with Injection start synchronized to start pump program		
	FRACTION COLLECTOR		
Software	Should be window XP operating system bases. It should control full HPLC system.		
	Communication should be on RS232 port/USB.		
	It should has graphical method editing, for visual optimization of component names, ISTD and reference peak identification search windows component grouping, and data processing and calibration parameters.		
	It should has the facility of display component names, retention times, relay events, and baseline timed events in Graphic method editing.		
	It should obtain average and %RSD value of summarized component Amounts, areaheights, response factors.		
Make	Japan, US, Europe or Equivalent		
Warranty	1-year Warranty including power fluctuation coverage		
Price List of Spare Parts attached	Price List of Spare and Consumable Parts is attached mandatorily		

Certificate by the Bidder:

It is Certified that above quoted specification for the Preparative HPLC with all Accessories is complete in all respects (Hardware, Software, Accessories etc.) and the Equipment does not require any additional Hardware/Software/Accessories to perform its functions/tests.

Name of Bidder: _____

Stamp and Signature: _____

UNIVERSITY OF PESHAWAR
Procurement of ARL Equipment - ITB No. 05/UoP/MP-IV/ARL

TECHNICAL SPECIFICATION COMPLIANCE FORM

UoP Requirement/Specification as per Bidding Document		Response of Bidder		
S.No.	Item/Part Name	Required Specification	Quoted Model/Specification	100% Compliance (Yes/No)/ Commentary
13	Item Type	Fluorescent Microscope		
	Brand Name and Model No.	International Brand		
	Optical System	Universal optical system (infinity-corrected) or better		
	Microscope Frame			
	Illumination	External light source, Light preset switch, LED voltage indicator Reflected/transmitted changeover switch		
	Focus	Motorized focusing, Stroke 25 mm, Minimum graduation 0.01µm		
	Max. Specimen Height	25-65 mm (w/o spacer)		
	Observation Tubes			
	Widefield	Inverted, trinocular		
	Super Widefield	Inverted: trinocular		
	Erect	trinocular, tilting trinocular		
	Reflected Light Illumination			
	BF etc	BX-RLAA		
		Motorized BF/DF changeover		
		Motorized AS		
	Reflected Fluorescence	BX-RFAA		
		Motorized 6 position turret		
		Built-in motorized shutter		
	With FS, AS			
	Transmitted Light			

	100W halogen		
	Abbe/long working distance condensers		
	Built-in transmitted light filters (LBD, ND25,ND6)		
Revolving Nosepiece			
For BF	Motorized sextuple		
For BF/DF	Motorized quintuple, motorized sextuple, centering quintuple		
Stages	Coaxial left (right) handle stage with torque adjustment		
	Large-size coaxial left (right) handle stage with lock mechanism in Y axis		
	Compatible CCD digital camera with following minimum specifications:		
Microscope Digital Camera:			
Camera Type:	Color / Monochrome 2CCD camera or Better Pixel shifting (only for color CCD) Cooling system: Peltier device (max. Ta -10 degree C) or Better		
Image Sensor Size:	[Color] 2/3 inch 1.45-4.45 mega pixels color CCD, RGB colors on chip filter [Monochrome] or Better CCD sensor with its "global shutter" design or better 1.45 mega pixels monochrome CCD or Better		
Live frame Rate:	1200 x 1200 (1x1): 10-15 fps, or Better 600 x 600 (1x1) : 10-15 fps or Better 600 x 590 (2x2): 20-35 fps, or better 300 x 280 (4x4): 40-57 fps or better		
Scanning Mode:	Progressive Scan		
Camera Mount:	B4 mount (2/3 inch Bayonet mount) or better		
Exposure Control:	Mode (Auto) or better Adjustment (± 2.0 EV step: 1/3 EV) or better Exposure Time (23 μ s to 60 s) or better		
Metering Mode:	Full image, 20-50%, 1-4%, 0.1-0.5% or better		

Binning:	2 x 2 and 4 x 4 or better With original Operating Software		
Make	Japan, US, Europe or Equivalent		
Warranty	1-year Warranty including power fluctuation coverage		
Price List of Spare Parts attached	Price List of Spare and Consumable Parts is attached mandatorily		

Certificate by the Bidder:

It is Certified that above quoted specification for the Fluorescent Microscope is complete in all respects (Hardware, Software, Accessories etc.) and the Equipment does not require any additional Hardware/Software/Accessories to perform its functions/tests.

Name of Bidder: _____

Stamp and Signature: _____

UNIVERSITY OF PESHAWAR
Procurement of ARL Equipment - ITB No. 05/UoP/MP-IV/ARL

TECHNICAL SPECIFICATION COMPLIANCE FORM

S.No.	UoP Requirement/Specification as per Bidding Document		Response of Bidder	
	Item/Part Name	Required Specification	Quoted Model/Specification	100% Compliance (Yes/No)/ Commentary
14	Item Type	Uv/Vis NIR System		
	Brand Name and Model No.	International Brand		
	Principle	Doublebeam, double monochromator, UV/Vis/NIR spectrophotometer.		
	Optical System	Aberration corrected Czerny Turner monochromator.		
	Detector	Photomultiplier Tube for UV/Vis range & InGaAs for NIR range.		
	Source	Pre-aligned tungsten-halogen and deuterium & source doubling mirror for improved UV/Vis/NIR energy.		
	Wavelength Range	190 nm - 3300 nm		
	Resolution	0.1 nm		
	Stray Light			
		At 200 nm: 10 g/L NaI = 0.00008% T max		
		At 340nm: 50mg/L NaNO ₂ = 0.00008% T max		
		At1420nm: H ₂ O 1cm pathlength= 0.0005%T		
		At 2365 nm: CHCl ₃ 1 cm path length ≤ 0.00050 %T		
		Wavelength Accuracy: UV/Vis ± 0.1 nm, NIR ± 0.600 nm		
	Wavelength Reproducibility			
		UV/Vis (Deuterium lamp lines) ≤ 0.010 nm		
	NIR (Deuterium lamp lines) ≤ 0.040 nm			
	Standard deviation of 10 measurements			

	UV/Vis: $\leq 0.005\text{nm}$ Standard deviation of 10 measurements NIR: $\leq 0.020\text{ nm}$		
Photometric Accuracy			
	Double Aperture Method 1 A $\pm 0.003\text{ A}$		
	Double Aperture Method 0.5 A $\pm 0.0003\text{ A}$		
	NIST 1930D Filters 2 A $\pm 0.0030\text{ A}$		
	NIST 930D Filters 1 A $\pm 0.0030\text{ A}$		
	NIST 930D Filters 0.5 A $\pm 0.0020\text{ A}$		
	K ₂ Cr ₂ O ₇ -Solution USP/DAP method $\pm 0.0080\text{ A}$		
	Photometric Range: -2 to +6 Abs		
Band Pass			
	0.05 nm - 5.00 nm in 0.01 nm increments UV/Vis range		
	0.20 nm - 20.00 nm in 0.04 nm increments NIR range		
Integrating Sphere Attachment			
	Used for the measurement of diffuse and specular reflectance and Transmission of liquid and solid samples with full accessories		
	Licensed Software		
Computer	Branded Computer with 19" LED Monitor with Printer.		
Make	Japan, US, Europe or Equivalent		
Warranty	1-year Warranty including power fluctuation coverage		
Price List of Spare Parts attached	Price List of Spare and Consumable Parts is attached mandatorily		

Certificate by the Bidder:

It is Certified that above quoted specification for the Uv/Vis NIR System is complete in all respects (Hardware, Software, Accessories etc.) and the Equipment does not require any additional Hardware/Software/Accessories to perform its functions/tests.

Name of Bidder: _____

Stamp and Signature: _____

UNIVERSITY OF PESHAWAR
Procurement of ARL Equipment - ITB No. 05/UoP/MP-IV/ARL

TECHNICAL SPECIFICATION COMPLIANCE FORM

UoP Requirement/Specification as per Bidding Document		Response of Bidder		
S.No.	Item/Part Name	Required Specification	Quoted Model/Specification	100% Compliance (Yes/No)/ Commentary
15	Item Type	FT-IR with ATR		
	Brand Name and Model No.	International Brand		
	Wavelength Range	7800 - 350 cm-1 proprietary KBr beam splitter,		
	Resolution	0.5 cm-1 or Better		
	Precision	Better than 0.01 cm-1		
	Accuracy	0.1 cm-1		
		Signal-to-noise: 30,000:1 or Higher		
	Optical System			
	Interferometer	Self-compensating for dynamic alignment, High stability, Rotary Michelson interferometer.		
		Sealed interferometer with auto dryer		
	Laser	Helium Neon		
		Detector (standard): DLATGS/ High linearity room temperature detector.		
	Beam Splitter	Germanium coated KBr.		
	Desiccant	Long-life, Typical lifetime 3 years at 25°C and 70% relative humidity. The system must have a software controlled desiccant status indicator for accurate monitoring the status of the desiccated area.		
Accessory Recognition	Equipped with automatic accessory recognition mechanism.			
Sample Type for Analysis	Solid and Liquid			

	Licensed Software	Spectrum measurement, Continuous measurement, Atmospheric correction, Manipulation Functions, GLP/GMP support.		
		System must be CFR part 11 Compliance, FT-IR spectral library		
		Branded PC and laser printer		
	Make	Japan, US, Europe or Equivalent		
	Warranty	1-year Warranty including power fluctuation coverage		
	Price List of Spare Parts attached	Price List of Spare and Consumable Parts is attached mandatorily		

Certificate by the Bidder:

It is Certified that above quoted specification for the FT-IR with ATR is complete in all respects (Hardware, Software, Accessories etc.) and the Equipment does not require any additional Hardware/Software/Accessories to perform its functions/tests.

Name of Bidder: _____

Stamp and Signature: _____

5. Price Schedule

Name of Bidder _____ ITB Number _____

1	2	3	4	5	6	7	8=6x7	9
S.No.	Equipment Name	Make and Country of Origin	Model No. and Year in which Principal has commenced manufacturing of this specific model	Currency ¹	Unit Price CPT-UoP (Inclusive of Incidental Services) [with 1 (one) year mandatory warranty from the date of commissioning]	Qty	Total Price CPT-UoP	Price List ² of Spare and Consumable Parts is attached mandatorily (Yes/No)

Total Bid Value in Pak Rupees ³	
Bid Security @ 2% of the Bid Value in Pak Rupees	
CDR No. Date of Issue and Issuing Bank	

Prices with Two-Year and Three-Year Warranty: Will be considered by the Procuring Agency for the purpose of Procurement subject to available of funds

Unit Price CPT-UoP with Two-Year Warranty	
Unit Price CPT-UoP with Three-Year Warranty	

¹ For equipment, that the bidder will supply/provide from within Pakistan, the bid currency shall be Pakistani Rupee (PKR);

For equipment that the bidder will import/supply from outside Pakistan through LC, the bid currency may be any foreign currency.

² Prices shall remain the same/locked for three years after successful installation of the equipment.

³ Where quoted price is in foreign currency, the rate of exchange shall be the selling rate, prevailing two days before the date of opening of Technical Bids specified in the Bid Data Sheet, as notified by the State Bank of Pakistan.

Signature of Bidder _____

6. Bid Security Form

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

KNOW ALL PEOPLE by these presents that WE [name of bank] of [name of country], having our registered office at [address of bank] (hereinafter called "the Bank"), are bound unto [name of Procuring agency] (hereinafter called "the Procuring agency") in the sum of for which payment well and truly to be made to the said Procuring agency, the Bank binds itself, its successors, and assigns by these presents. Sealed with the Common Seal of the said Bank this ____ day of _____ 20____.

THE CONDITIONS of this obligation are:

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

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

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

[signature of the bank]

7. Contract Form

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

WHEREAS the Procuring agency invited bids for certain goods and ancillary services, viz., *[brief description of goods and services]* and has accepted a bid by the Supplier for the supply of those goods and services in the sum of *[contract price in words and figures]* (hereinafter called “the Contract Price”).

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.

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

- (a) the Bid Form, Firm Level Eligibility and Qualification Requirements Form, Product Level Mandatory Qualification Requirement Form, Technical Specification Compliance Form, and Price Schedule submitted by the Bidder;
- (b) the Schedule of Requirements;
- (c) the Technical Specifications;
- (d) the General Conditions of Contract;
- (e) the Special Conditions of Contract; and
- (f) the Procuring Agency’s Notification of Award.

3. In consideration of the payments to be made by the Procuring agency to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Procuring agency to provide the goods and services and to remedy defects therein in conformity in all respects with the provisions of the Contract

4. The Procuring agency hereby covenants to pay the Supplier in consideration of the provision of the goods and services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the contract at the times and in the manner prescribed by the contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with their respective laws the day and year first above written.

Signed, sealed, delivered by _____ the _____ (for the Procuring Agency)

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

8. Performance Security Form

Issuing Authority:
Date of Issuance:
Date of Expiry:
Claim Lodgment Date:
(Must be one month later than the expiry date)

To: *[name of Procuring agency]*

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

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

AND WHEREAS *[Name of the Bank]* having registered office at *[Address of the Bank]* has 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]

9. Bank Guarantee for Advance Payment

To: *[name of Procuring agency]*

[name of Contract]

Gentlemen and/or Ladies:

In accordance with the payment provision included in the Special Conditions of Contract, which amends Clause 16 of the General Conditions of Contract to provide for advance payment, *[name and address of Supplier]* (hereinafter called "the Supplier") shall deposit with the Procuring agency a bank guarantee to guarantee its proper and faithful performance under the said Clause of the Contract in an amount of *[amount of guarantee in figures and words]*.

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

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

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

Yours truly,

Signature and seal of the Guarantors

[name of bank or financial institution]

[Address]

[date]

10. Manufacturer's Authorization Form

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

To: *[name of the Procuring agency]*

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

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

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

[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.

11. Integrity Pact

(To be submitted on legal stamp paper)

DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC. PAYABLE BY THE SUPPLIERS OF GOODS, SERVICES & WORKS IN CONTRACTS WORTH RS. 10.00 MILLION OR MORE

Contract No. _____ Dated _____ Contract Value: *[To be filled in at the time of signing of Contract]* 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 University of Peshawar (UoP)/ Government of Khyber Pakhtunkhwa (GoKP)/Government of Pakistan (GoP) or any administrative subdivision or agency thereof or any other entity owned or controlled by UoP/GoKP/GoP 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 UoP/GoKP/GoP, 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 UoP/ GoKP/GoP 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 UoP/GoKP/GoP under any law, contract or other instrument, be voidable at the option of UoP/GoKP/GoP.

Notwithstanding any rights and remedies exercised by UoP/GoKP/GoP in this regard, [name of Supplier] agrees to indemnify UoP/GoKP/GoP for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to UoP/GoKP/GoP in an amount equivalent to ten times 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 UoP/GoKP/GoP.

Name of Buyer:

Name of Seller/Supplier:

Signature:[Seal]

Signature:{Seal}