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FINANCIAL YEAR – 25-26

**BIDDING DOCUMENTS FOR PROCUREMENT OF
CHEMICAL ENGINEERING LAB EQUIPMENTS UNDER REVENUE
COMPONENT AS PER APPROVED PC-1 FOR CONSTRUCTION OF
BUILDING OF MUHAMMAD NAWAZ SHARIF UNIVERSITY OF
ENGINEERING & TEVHNOLOGY MULTAN.**



BWP Road, BCG Chowk, Inside Govt. College of
Technology, Qasim Pur Colony, MNS UET Multan

OFFICE OF THE TREASURER MULTAN
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BID REFERENCE NO.

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SECTION-I: INVITATION TO BIDS

MUHAMMAD **NAWAZ** SHARIF UNIVERSITY OF ENGINEERING & TECHNOLOGY, MULTAN

Sealed bid of the following category,are invited under PPRA Rules 2014 (ammended) through E-Pak Acquisition and Disposal System (EPADS).The bidder participating must not be blacklisted by the procuring agency or by the PPRA in the whole punjab.Bidder must have registration with the relevant Tax Departments of Govt. of Pakistan.Bids are invited on the basis of Single Stage (Two envelope procedure) according to rule 38(2)(a) of Punjab Procurement Rules, 2014 for ADP Funded G.s NO.90 MNS-University of Engineering & Technology, Multan on DDP basis.

Details given below:-.

Sr.#	Description	Last Date & Time for submission of Tender	Date & Time for opening of Tender
01.	Tender for procurement of Chemical Engineering Lab Equipments under revenue component as per approved PC-1 for Construction of Building of Muhammad nawaz Sharif University of Engineering & Technology Multan for the year 2025-2026.	17 Nov, 2025 at 11:00 AM	17 Nov, 2025 at 11:40 AM

- Interested eligible bidders may download the bidding document containing detailed terms & conditions and quantities free of cost from the websites of Punjab Procurement Regulatory Authority and the procuring agency i.e., www.ppra.punjab.gov.pk, www.mnsuet.edu.pk & <https://punjab.eprocure.gov.pk>.
- Single stage – Two envelope bidding procedure** shall be applied as specified in PPRA Rules, 2014 (amended).
- Participation in the bidding process through (**E.Pak Acquisition & Disposal System**) portal is compulsory for all the bidders. The intending bidder shall submit their profiles including technical & financial bids online through (**EPADS**) portal only, before closing time & date.
- Technical bids will be opened on the same day at 11:40 AM. on(**EPADS**) in the presence of the Tender committee and the vendor or their resperantative who choose to be present .
- The original bid security @2% of total estimated price for whole procurement in the shape of CDR/Bank draft in the name of Treasurer MNS UET Multan must be submitted in physical form well before the closing time and date at the office of Treasurer.**The very same must be uploaded before the closing time on EPADS.**
Bid Security:2% of the Total Estimated Cost amounting to Rs: 1,606,720 for whole procurement:
Total Estimated cost of whole procurement: Rs: 80,336,000/-
- MNS UET Multan will not be responsible for any cost or expense incurred by bidders in relation to the preparation or electronic submission of bids.

7. In the event that the date of opening is declared a public holiday by the government or a non-working day for any reason, the next official working day will be considered as the new date for uploading on **(EPADS)** submission and opening of tenders. The time and venue will remain unchanged.
8. All assessments and procurement procedures, including uploading on **(EPADS)**, downloading/receiving, opening, evaluating, and awarding, shall be governed by the Punjab Procurement Rules-2014. In case of any conflict between the bidding documents and the PPRA Rules 2014, the rules shall prevail.
9. In case e-bid or e-proposal including entries and record submitted on e-PADS is found corrupt, unreadable, contains virus, such e-bid or e-proposal shall be rejected.
10. The URL of the website of PPRA is (<https://eproc.punjab.gov.pk/ActiveTenders.aspx>) and response time shall be calculated exclusively from the date of publication of the advertisement on website of PPRA which is 31-10-2025.

Note: The participants may send their bids in hard form as well.

Treasurer/Addl. Treasurer
MNS UET Multan

(B) Section -II: Instructions to Bidders (ITB)

Note:- All the procurement procedures shall be conducted in accordance with Punjab Punjab Procurement Rules-2014 (ammended upto date).

2.1. Introduction

- 2.1.1 Scope of Bid**
- i) The Procuring Agency (PA), as indicated in the Bid Data Sheet (BDS) invites Bids for the provision of Goods as specified in the Section-IV Bid Data Sheet (BDS) and Section III - Technical Specifications & Section VII- Schedule of Requirements. The successful Bidders will be expected to deliver, install/ commissioning) the goods within the specified period and timeline(s) as stated in the BDS.
- 2.1.2 Source of Funds**
- i) The Procuring Agency named in the Bid Data Sheet has received budget from the Government of Punjab. The Procuring Agency intends to apply the provided funds/ a portion of this budget to make eligible payments under the contract for which the Invitation to bids has been issued.
- 2.1.3 Eligible Bidders**
- i) The Invitation to Bids is open to all suppliers i.e. association of firms/companies/sole proprietor/ general order suppliers registered with relevant Registration Authorities and Tax Departments/ Authorities (Income Tax, Sales Tax & Punjab Sales Tax etc.) registered on EPAD except as provided herein after.
 - ii) 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 consultancy 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 to Bids [if applicable].
 - iii) Government-owned enterprises may participate only if they are duly/legally authorized in this regard by the respective/relevant competent forum/authority.
 - iv) Bidders shall not be under a declaration of blacklisting by the Procuring Agency.
 - v) The invitation for Bids is open to all prospective Supplier, Manufacturers or Authorized Agents/Dealers/Distributors subject to any provisions or licensing/regulatory requirements issued by the respective National/ Provincial Professional Statutory Body established for that particular trade or business as mentioned in the bid data sheet (EPADS).
 - vi) A Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be Non-Responsive. A Bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if they:

- a) Are associated or have been associated for the procurement of the goods to be purchased under this Invitation for Bids, 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.
 - b) Have controlling shareholders in common; or
 - c) Receive or have received any direct or indirect subsidy from any of them; or
 - d) Have the same legal representative for purposes of this Bid; or
 - e) Have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the Bid of another Bidder, or influence the decisions of the Procuring Agency regarding this Bidding process; or
- xii) A Bidder may be ineligible if –
- (a) The Bidder is declared bankrupt or, in the case of company or firm, insolvent;
 - (b) Payments in favor of the Bidder is suspended in accordance with the judgment of a court of law other than a judgment declaring bankruptcy and resulting, in accordance with the national laws, in the total or partial loss of the right to administer and dispose of its property;
 - (c) Legal proceedings are established against such Bidder involving an order suspending payments and which may result, in accordance with the national laws, in a declaration of bankruptcy or in any other situation entailing the total or partial loss of the right to administer and dispose of the property;
 - (d) The Bidder is convicted, by a final judgment, of any offence involving professional conduct;
 - (e) The Bidder is debarred and blacklisted due to involvement in corrupt and fraudulent practices in accordance with the provision of section 17A of PPRA Act, 2009 and Rule-21, read with Schedule appended with, Punjab Procurement Rules, 2014.
 - (f) The Bidder is debarred and blacklisted in general (i.e. to the extent of all public procurement) due to consistent performance failure in accordance with the section 17A of PPRA Act, 2009 and Rule-21, read with Schedule appended with, Punjab Procurement Rules, 2014.

- (g) The firm, supplier and contractor is blacklisted/ debarred by any international organization.
 - xiii) Bidders shall provide to the Procuring Agency evidence of their eligibility, and proof of compliance with the necessary legal requirements to carry out the contract effectively.
 - xiv) Bidders shall provide such evidence of their continued eligibility satisfactory to the Procuring Agency, as the Procuring Agency shall reasonably request.
 - xv) Bidders shall submit proposals relating to the nature, conditions and modalities of sub-contracting wherever the sub-contracting of any elements of the contract amounting to more than ten percent of the Bid price is envisaged.
- 2.1.4. Eligible Goods and Services**
- i) All goods and related services to be supplied under the Contract shall have their origin in eligible source countries, defined in the Bid Data Sheet (BDS/Technical Specification), and all expenditures made under the contract will be limited to such goods and related services.
 - ii) 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 is obtained that is substantially different in basic characteristics or in purpose or utility from its components.
 - iii) The origin of goods and services is distinct from the nationality of the Bidder. In any case, the requirements of Rules 10 & 26 of PPR-14, shall be followed.
- 2.1.5. Cost of Bidding**
- i) 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.
- 2.1.6. One person one bid**
- i) As per Rule 36A of Punjab Procurement Rules 2014, a Bidder shall submit only one Bid in the same bidding process, either individually as a Bidder or as a member.
 - ii) No Bidder can be a sub-contractor while submitting a Bid in the same Bidding process.
 - iii) A Bidder, if acting in the capacity of sub-contractor in any Bid, shall not submit bid for the same.

2.2. The Bidding Documents

2.2.1. Content of Bidding Documents

- i) The goods required, Bidding procedures, and contract terms are prescribed in the Bidding documents. The Bidding documents, inter alia, include:
 - (a) Invitation to Bids

- (b) Instructions to Bidders (ITB)
 - (c) Technical Specifications
 - (d) Bid Data Sheet
 - (e) General Conditions of Contract (GCC)
 - (f) Special Conditions of Contract (SCC)
 - (g) Schedule of Requirements
 - (h) Bid Form
 - (i) Manufacturer's Authorization Form
 - (j) Bidder Profile Form
 - (k) General Information Form
 - (l) Affidavit
 - (m) Bid Security Form
 - (n) Technical Bid Form
 - (o) Contract Form
 - (p) Financial Bid Form / Price Schedule
 - (q) Performance Guarantee Form
 - (r) Check List
- ii) The Bidder is required to examine all instructions, forms, terms, and specifications in the Bidding documents. Failure to furnish all information as required by the Bidding documents or to submit a Bid not responsive to the Bidding documents in every respect will be at the Bidder's risk and may result in the rejection of its Bid.
 - iii) In case of discrepancies between the Invitation to Bid and the Bidding Documents listed in **ITB 2.2.1 (i)** above, the said Bidding Documents, not in conflict with any provision of PPR-14, will take precedence.
 - iv) The Procuring Agency is not responsible for the completeness of the Bidding Documents and their addenda, if they were not obtained directly from the Procuring Agency or from its website or website of PPRA. Re-confirming from the Procuring Agency that all pages/ contents have been properly and clearly received is the prime responsibility of the Bidder.
- 2.2.2. Clarification of Bidding Documents**
- i) A prospective Bidder requiring any clarification of the Bidding documents may notify the Procuring Agency in writing or by email at the Procuring Agency's address indicated in Invitation to Bid/ Tender Notice/ Advertisement. The Procuring Agency will respond in writing to any request for clarification of the Bidding documents which it receives no later than seven (7)

days prior to the deadline for the submission of Bids prescribed in the Bid Data Sheet. Written copies of the Procuring Agency's response (including an explanation of the query but without identifying) will be sent to all prospective Bidders that have received the Bidding documents.(unless/otherwise specified in BDS)

- ii) A prospective Bidder requiring any clarification of the Bidding Documents may notify the Procuring Agency in writing or in electronic form that provides record of the content of communication at the Procuring Agency's address indicated in the **BDS**.
- iii) The Procuring Agency will within three (3) working days after receiving the request for clarification, respond in writing or in electronic form to any request for clarification provided that such request is received not later than seven (7) days prior to the deadline for the submission of Bids. As prescribed in **ITB 2.2.2 (i), above**. However, this clause shall not apply in case of alternate methods of Procurement.(unless/otherwise specified in BDS)
- iv) Copies of the Procuring Agency's response will be uploaded on the EPADS & website/ of procuring agency on given date and forwarded to identified Prospective Bidders through an expeditious identified source of communication, e.g.: e-mail etc., including a description of the inquiry, but without identifying its source.
- v) Should the Procuring Agency deem it necessary to amend the Bidding Documents as a result of a clarification, it shall do so following the procedure under **ITB 2.2.3**.
- vi) If indicated **in the BDS**, the Bidder's designated representative is invited at the Bidder's cost to attend a pre-Bid meeting at the place, date and time mentioned **in the BDS**. During this pre-Bid meeting, prospective Bidders may request clarification of the schedule of requirement, the Evaluation Criteria or any other aspects of the Bidding Documents.
- vii) Minutes of the pre-Bid meeting, if applicable, including the text of the questions asked by Bidders, including those during the meeting (without identifying the source) and the responses given, together with any responses prepared after the meeting will be transmitted promptly to all prospective Bidders who have obtained the Bidding Documents and by uploading same on the website of the procuring agency. Any modification to the Bidding Documents that may become necessary as a result of the pre-Bid meeting shall be made by the Procuring Agency exclusively through the use of an Addendum pursuant to ITB 2.2.3. Non-attendance at the pre-Bid meeting will not be a cause for disqualification of a Bidder.

2.2.3. Amendment of Bidding Documents

- i) At any time prior to the deadline for submission of Bids, but not later than three (3) days before the closing date of the submission of Bid, the Procuring Agency, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, may modify the Bidding documents by amendment. Any such change/amendment in the Bidding documents shall be provided in a timely manner, preferably through electronic means also, not later than three

(3) days, and on equal opportunity basis as per Rule-25(3) OR Rule 25(4) of PPR-14 as the case may be.

- ii) In order to allow prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Procuring Agency, at its discretion, may extend the deadline for the submission of Bids, as per rule 29 of PPR-14, in the manner similar to the original advertisements, so as to avoid any inconvenience and to doubly ensure level playing field for all prospective bidders.

2.3. Preparation of Bids

2.3.1. Language of Bid

- i) 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 same language.

2.3.2. Bid Form

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

2.3.3. Bid Prices

- i) The Bidder shall indicate on form 8.10 the unit prices (where applicable) and total Bid price of the goods it proposes to supply under the contract.
- ii) Prices indicated on the Price Schedule shall be item wise/ package wise **[to be decided by the Procuring Agency on form 8.10]**
- iii) The Bidder's separation of price components in accordance with ITB Clause 2.3.3(ii) 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.
- iv) 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 non-responsive and may be rejected.

2.3.4. Bid Currencies

- i) Prices shall be quoted in **Pak Rupees** for local/DDP items unless otherwise specified in the Bid Data Sheet.

2.3.5. Documents Establishing Bidder's Eligibility and Qualification

- i) Pursuant to ITB Clause 2.1.3, 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.
- ii) 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 eligible as defined under ITB Clause 2.1.3.

- iii) 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 [Manufacturer's Authorization form No. 8.3] or producer to supply the same in Pakistan;
 - (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 Pakistan, 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.

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

- i) Pursuant to ITB Clause 2.1.4, the Bidder shall furnish, as part of its Bid, documents establishing the eligibility and conformity to the Bidding documents of all goods and related services which the Bidder proposes to supply under the contract.
- ii) The documentary evidence of the eligibility of the goods and services shall consist of a statement in the Price Schedule/Financial Bid Form 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.
- iii) The documentary evidence of conformity of the goods and services to the Bidding documents may be in the form of literature, drawings, 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 **responsiveness** of the goods and services to those specifications, or a statement of deviations and exceptions to the provisions of the Technical Specifications.
- iv) For purposes of the commentary to be furnished, 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.

- v) Where a sample(s) is required by a procuring agency, the sample shall be:
 - (a) submitted as part of the bid, in the quantities, dimensions and other details requested in the **BDS**;
 - (b) carriage paid;
 - (c) received on, or before, the closing time and date for the submission of bids; and
 - (d) Evaluated to determine compliance with all characteristics listed in the **BDS**.{However, the procuring agency may also opt to ask for samples after submission of technical bids (where require)}
- vi) The Procuring Agency may retain the sample(s) of the successful Bidder till the successful delivery of the goods. A Procuring Agency may reject the Bid if the sample(s)-
 - (a) do(es) not conform to all characteristics prescribed in the bidding documents; and
 - (b) is/are not submitted within the specified time clearly mentioned in the Bid Data Sheet.
- vii) Where it is not possible to avoid using a propriety article as a sample, a Bidder shall make it clear that the propriety article is displayed only as an example of the type or quality of the goods being Bided for, and that competition shall not thereby be limited to the extent of that article only.
- viii) Samples made up from materials supplied by a Procuring Agency shall not be returned to a Bidder nor shall a Procuring Agency be liable for the cost of making them.
- ix) All samples produced from materials belonging to an unsuccessful Bidder may be kept by the Procuring Agency till thirty (30) days from the date of award of contract or exhaust of all the grievance forums (including those pending at Authority's Level or in some Court of Law).
- x) **Pursuant to the requirements as indicated in ITB 2.3.6, the Bidder shall furnish, as part of its Bid, all those documents establishing the eligibility in conformity to the terms and conditions specified in the Bidding Documents for all goods and related services which the Bidder proposes to deliver.**
- xi) The Bidder shall also furnish a list giving full particulars, including available sources and current prices of goods, spare parts, special tools, etc., necessary for the proper and continuing functioning of the Goods during the period **specified in the BDS** following commencement of the use of the goods by the Procuring Agency.
- xii) The required documents and other accompanying documents must be in English. In case any other language than English is used the pertinent translation attested by the embassy in

country of manufacturer into English shall be attached to the original version.

2.3.7. Bid Security

- i) The Bidder shall furnish, as part of its Bid, a Bid security in the amount specified in the Bid Data Sheet. **Copy of Bid security must be uploaded on EPADS.**
- ii) 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 2.3.8. (vii).
- iii) The Bid security shall be in Pakistan Rupees and shall be in one of the following forms:
 - (a) Bank call-deposit (CDR), Demand Draft (DD), Pay Order (PO) valid for the contract period as defined in purchase order or contract Agreement.
- iv) Any Bid not secured in accordance with ITB Clauses 2.3.8 (i) and (ii) may be rejected by the Procuring Agency as non-responsive.
- v) Unsuccessful Bidders' Bid security will be discharged or returned as promptly as possible but not later than 30 (Thirty) days after the expiration of the period of Bid validity prescribed by the Procuring Agency pursuant to ITB Clause 2.3.8 (ii) or along with unopened financial proposal as per rule 38(2)(a)(vii) of PPR-14, which shall take precedence, and is as under: (SEE BDS)

"38(2)(a)(vii) the financial proposal of the Bids found technically non-responsive shall be retained unopened and shall be returned on the expiry of the grievance period or the decision of the complaint, if any, filed by the non-responsive Bidder, whichever is later:
provided that the Procuring Agency may return the sealed financial proposal earlier if the disqualified or non-responsive Bidder, contractor or consultant submits an affidavit, through an authorized representative, to the effect that he is satisfied with the proceedings of the Procuring Agency".
- vi) The successful Bidder's Bid security will be discharged upon the Bidder signing the contract, pursuant to ITB Clause 2.6.1, and furnishing the Performance Guarantee, pursuant to ITB Clause 2.6.2.
- vii) 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:
 - i. Fails to sign the contract in accordance with ITB Clause 2.6.3; **or**
 - ii. Fails to furnish Performance Guarantee in accordance with ITB Clause 2.6.2; or
 - iii. If the blacklisting proceedings under Section-17A of PPRA Act, 2009 read with Rule-21 of PPR-14 are

initiated and the bidder is declared blacklisted after due process of law.

2.3.8. Period of Validity of Bids

- i) Bids shall remain valid for the period specified in the Bid Data Sheet after the date of Bid opening prescribed by the Procuring Agency. A Bid valid for a shorter period may be rejected by the Procuring Agency as non-responsive.
- ii) In exceptional circumstances, the Procuring Agency may solicit the Bidder's consent to an extension of the period of validity (as per rule-28 of PPR-14). The request and the responses thereto shall be made in writing (or by email). The Bid security provided under ITB Clause 2.3.8 shall also be suitably extended. A Bidder may refuse the request without forfeiting its Bid security. A Bidder accepting the request will not be required nor permitted to modify its Bid.

2.3.9. Format and Signing of Bid

- i) 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 prevail.
- ii) The Bidder shall authorize a person/ persons for signing, submission and further correspondence with Procuring Agency on behalf of bidder. Authority letter must be part of bid. However, in case of any issue bidder shall be responsible for all consequences.
- iii) 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 duly authorized to bind the Bidder to the contract. All pages of the Bid, shall be signed and stamped by the authorized person.
- iv) Any interlineation, erasures, or overwriting shall be valid only if they are initialed by the authorized person for signing the Bid.
- v) 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 duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as specified in the **BDS** and shall be attached to the Bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the Bid, shall be signed and stamped by the authorized person.
- vi) Any interlineations, erasures, or overwriting shall be valid only if they are signed by the person or persons signing the Bidder.
- vii) 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.

2.4. Submission of Bids

2.4.1 Sealing and Marking of Bids

- i) As per Rule 24, the Bidder shall seal the original and each copy of the Bid in separate envelopes, duly marking the envelopes

as “ORIGINAL” and “COPY.” The envelopes shall then be sealed in an outer envelope.(Through Epads)

- ii) 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 title of procurement Activity indicated in the Bid Data Sheet, the Invitation to Bids (ITB) title and number indicated in the Bid Data Sheet, and a statement: “DO NOT OPEN BEFORE..... (time and date),” [to be completed with the time and the date specified in the Bid Data Sheet, pursuant to ITB Clause 2.4.2.]
- iii) 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”.
- iv) If the outer envelope is not sealed and marked as required by ITB Clause 2.4.1 (i), the Procuring Agency will assume no responsibility for the Bid’s misplacement or premature opening.
- v) In case of Single Stage One Envelope Procedure, the Bidder shall seal the original and each copy of the Bid in separate envelopes, duly marking the envelopes as “ORIGINAL” and “COPY.” The envelopes shall then be sealed in an outer envelope securely sealed in such a manner that opening and resealing cannot be achieved undetected.
Note: The envelopes shall be sealed and marked in accordance with the bidding procedure adopted as referred in Rule-38 of PPR-2014, which shall have precedence.
- vi) The inner and outer envelopes shall:
 - a) Be addressed to the Procuring Agency at the address given in the **BDS**; and
 - b) Bear the title of the subject procurement or Project name, as the case may be as indicated in the **BDS**, the Invitation to Bids (ITB) title and number indicated in the **BDS**, and a statement: “DO NOT OPEN BEFORE,” to be completed with the time and the date specified in the **BDS**, pursuant to **ITB 2.4.2**.
- vii) In case of Single Stage Two Envelope Procedure, The Bid shall comprise two envelopes submitted simultaneously, one called the Technical Proposal and the other Financial Proposal. Both envelopes to be enclosed together in an outer single envelope called the Bid. Each Bidder shall submit his bid as under:
 - a) Bidder shall submit his **TECHNICAL PROPOSAL** and **FINANCIAL PROPOSAL** in separate inner envelopes and enclosed in a single outer envelope.
 - b) **ORIGINAL** and each copy of the Bid shall be separately sealed and put in separate envelopes and marked as such.
 - (c) The envelopes containing the **ORIGINAL** and copies will be put in one sealed envelope and addressed / identified as given in **BDS**.
- viii) The inner and outer envelopes shall:

- a) be addressed to the Procuring Agency at the address provided in the BDS;
 - b) bear the name and identification number of the contract as defined in the BDS; and provide a warning not to open before the time and date for bid opening, as specified in the BDS, pursuant to ITB 2.4.2;
 - c) In addition to the identification required in Sub- Clause (b) hereof, the inner envelope shall indicate the name and address of the Bidder to enable the bid to be returned unopened in case it is declared "late" pursuant to ITB.2.4.3.
- ix) If all envelopes are not sealed and marked as required by **ITB 2.4.1** or incorrectly marked, the Procuring Agency will assume no responsibility for the misplacement or premature opening of Bid.

2.4.2 Deadline for Submission of Bids

- i) Bids must be received by the Procuring Agency at the address specified under BDS no later than the time and date specified in the Bid Data Sheet. Bids received through courier services shall not be entertained.
- ii) The Procuring Agency may, at its discretion and as per rule 29 of PPR-14, extend this deadline for the submission of Bids by amending the Bidding documents in accordance with ITB Clause 2.2.2 & 2.2.3 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.

2.4.3. Late Bids

- iii) Bids shall be received by the Procuring Agency at the address specified under **BDS** no later than the date and time specified in the **BDS**.
- i) Any Bid received by the Procuring Agency after the deadline for submission of Bids prescribed by the Procuring Agency pursuant to ITB Clause 2.4.2 will be rejected and returned unopened to the Bidder.
- ii) The Procuring Agency shall not consider for evaluation any Bid that arrives after the deadline for submission of Bids.
- iii) Any Bid received by the Procuring Agency after the deadline for submission of Bids shall be declared late, recorded, rejected and returned unopened to the Bidder.

2.4.4. Modification and Withdrawal of Bids

- i) 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.
- ii) The Bidder's modification or withdrawal notice shall be prepared, sealed, marked, and dispatched in accordance with the provisions of Clause (i) A withdrawal notice may also be sent by email, but followed by a signed confirmation copy, postmarked not later than the deadline for submission of Bids.

- iii) No Bid may be modified after the deadline for submission of Bids.
- iv) 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 (along with other remedies available under PPR-14), pursuant to the ITB Clause 2.3.8 (vii).
- v) A Bidder may withdraw its Bid after it has been submitted, provided that written notice of the withdrawal of the Bid, is received by the Procuring Agency prior to the deadline for submission of Bids.
- vi) Revised bid may be submitted after the withdrawal of the original bid before the deadline for submission of Bids.

2.5. Opening and Evaluation of Bids

2.5.1. Opening of Bids by the Procuring Agency

- i) The Procuring Agency will open all Bids, in public, in the presence of Bidders' or their representatives who choose to attend, and other parties with a legitimate interest in the Bid proceedings at the place, on the date and at the time, specified in the **BDS**. The Bidders' representatives present shall sign a register/attendance sheet as proof of their attendance.
- ii) First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelope with the corresponding bid shall not be opened, but returned to the Bidder. No bid withdrawal shall be permitted unless the corresponding Withdrawal Notice contains a valid authorization to request the withdrawal and is read out at bid opening.
- iii) Second, outer envelopes marked "SUBSTITUTION" shall be opened. The inner envelopes containing the Substitution Bid shall be exchanged for the corresponding Original Bid being substituted, which is to be returned to the Bidder unopened. No envelope shall be substituted unless the corresponding Substitution Notice contains a valid authorization to request the substitution and is read out and recorded at bid opening.
- iv) Next, outer envelopes marked "MODIFICATION" shall be opened. No Technical Proposal and/or Financial Proposal shall be modified unless the corresponding Modification Notice contains a valid authorization to request the modification and is read out and recorded at the opening of the Bids. Any Modification shall be read out along with the Original Bid except in case of Single Stage Two Envelope Procedure where only the Technical Proposal, both Original as well as Modification, are to be opened, read out, and recorded at the opening. Financial Proposal, both Original and Modification, will remain unopened till the prescribed financial bid opening date.
- v) Other envelopes holding the Bids shall be opened one at a time, in case of Single Stage One Envelope Procedure, the Bidders names, the Bid prices, the total amount of each Bid, the presence or absence of Bid Security, Bid Securing Declaration and such other details as the Procuring Agency

may consider appropriate, will be announced by the Procurement Evaluation Committee.

- vi) In case of Single Stage Two Envelope Procedure, the Procuring Agency will open the Technical Proposals in public at the address, date and time specified in the **BDS** in the presence of Bidders' designated representatives who choose to attend and other parties with a legitimate interest in the Bid proceedings. The Financial Proposals will remain unopened and will be held in custody of the Procuring Agency until the specified time of their opening.
- vii) The envelopes holding the Technical Proposals shall be opened one at a time, and the following read out and recorded: (a) the name of the Bidder; (b) the presence of a Bid Security, if required; and (c) Any other details as the Procuring Agency may consider appropriate.
- viii) Bidders are advised to send in a representative with the knowledge of the content of the Bid who shall verify the information read out from the submitted documents. Failure to send a representative or to point out any un-read information by the sent Bidder's representative shall indemnify the Procuring Agency against any claim or failure to read out the correct information contained in the Bidder's Bid.
- ix) No Bid will be rejected at the time of Bid opening except for late Bids which will be returned unopened to the Bidder, pursuant to **2.4.3 (i)**.
- x) The Procuring Agency shall prepare minutes of the Bid opening. The record of the Bid opening shall include, as a minimum: the name of the Bidder and whether or not there is a withdrawal, substitution or modification, the Bid price if applicable.
- xi) The Bidders' representatives who are present shall be requested to sign on the attendance sheet. The omission of a Bidder's signature on the record shall not invalidate the contents and affect the record.
- xii) Minutes of the Financial Bid Opening shall be recorded and uploaded by the procuring agency on its website or shared to all bidders through e-mail.
[if Procuring Agency opts for single stage one envelope procedure as per rule 38(1) of PPR-14, clause (vi) to (xiii) should be formulated accordingly by the procuring agency.]
- i) Information relating to the examination, clarification, evaluation and comparison of Bids and recommendation of contract award shall not be disclosed to Bidders or any other persons not officially concerned with such process until the time of the announcement of the respective evaluation report in accordance with the requirements of rule 37 of PPR-14.

2.5.2. Confidentiality

- ii) Any effort by a Bidder to influence the Procuring Agency processing of Bids or award decisions may result in the rejection of its Bid.
- iii) Notwithstanding **ITB Clause 2.2.2** from the time of Bid opening to the time of contract award, if any Bidder wishes to contact the Procuring Agency on any matter related to the Bidding process, it should do so in writing or in electronic forms that provides record of the content of communication.

2.5.3. Clarification of Bids

- i) As per rule 33(2) of PPR-14, to assist in the examination, evaluation and comparison of Bids and post-qualification of the Bidders, the Procuring Agency may, at its discretion, ask any Bidder for a clarification of its Bid including breakdown of prices to determine its reasonability. Any clarification submitted by a Bidder that is not in response to a request by the Procuring Agency shall not be considered.
- ii) The request for clarification and the response shall be in writing or in electronic forms that provide record of the content of communication. In case of Single Stage Two Envelope Procedure, no change in the prices or substance of the Bid shall be sought, offered, or permitted. Whereas in case of Single Stage One Envelope Procedure, only the correction of arithmetic errors discovered by the Procuring Agency in the evaluation of Bids should be sought in accordance with ITB Clause 2.5.6.
- iii) The alteration or modification in The Bid which in any way affect the following parameters will be considered as a change in the substance of a bid:
 - a) Evaluation & qualification criteria;
 - b) Required scope of work or specifications;
 - c) All securities requirements;
 - d) Tax requirements;
 - e) Terms and conditions of bidding documents.
 - f) Change in the ranking of the Bidder
- iv) From the time of Bid opening to the time of Contract award if any Bidder wishes to contact the Procuring Agency on any matter related to the Bid it should do so in writing or in electronic forms that provide record of the content of communication.

2.5.4. Preliminary Examination

- i) 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.
- ii) Arithmetical errors will be rectified on the following basis:-
 - a. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected. If the Supplier does not accept

the correction of the errors, its Bid may be rejected, and its Bid security may be forfeited.

- b. If there is a discrepancy between words and figures, the amount in words will prevail.
- iii) Prior to the detailed evaluation, the Procuring Agency will determine the responsiveness of each Bid to the Bidding documents, pursuant to ITB Clause 2.5.5. For purposes of these Clauses, a 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 2.3.8), **Applicable Law** (GCC Clause 30), **Taxes and Duties** (GCC Clause 32) & mandatory Registrations/ Renewals 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.
- iv) If a Bid is not responsive, it will be rejected by the Procuring Agency and may not subsequently be made responsive by the Bidder by correction of the non-conformity.
- v) Prior to the detailed evaluation of Bids, the Procuring Agency will determine whether each Bid:
 - a) Meets the eligibility criteria defined in **ITB 2.1.3** and **ITB 2.1.4**;
 - b) Has been prepared as per the format and contents defined by the Procuring Agency in the Bidding Documents;
 - c) Has been properly signed;
 - d) Is accompanied by the required securities; and
 - e) Is responsive to the requirements of the Bidding Documents.

The Procuring Agency's determination of a Bid's responsiveness will be based on the contents of the Bid itself.

2.5.5. Examination of Terms and Conditions; Technical Evaluation

- i) The Procuring Agency shall examine the Bid to confirm that all terms and conditions specified in the **GCC** and the **SCC** have been accepted by the Bidder without any material deviation or reservation.
- ii) The Procuring Agency shall evaluate the technical aspects of the Bid submitted to confirm that all requirements specified in **Section III-Technical Specifications, Section VII – Schedule of Requirements & Evaluation Criteria as provided in BDS**, have been met without material deviation or reservation.
- iii) If after the examination of the terms and conditions and the technical evaluation, the Procuring Agency determines that the Bid is not responsive in accordance, it shall reject the Bid.

2.5.6. Correction of Errors

- i) Bids determined to be substantially responsive will be checked for any arithmetic errors. Errors will be corrected as follows: -

- a) If there is a discrepancy between unit prices 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, unless in the opinion of the Procuring Agency there is an obvious misplacement of the decimal point in the unit price, in which the total price as quoted shall govern and the unit price shall be corrected;
- b) If there is an error in a total corresponding to the addition or subtraction of sub-totals, the sub-totals shall prevail and the total shall be corrected; and
- c) Where there is a discrepancy between the amounts in figures and in words, the amount in words will govern.
- d) Where there is discrepancy between grand total of price schedule and amount mentioned on the Form of Bid, the amount referred in Price Schedule shall be treated as correct subject to elimination of other errors.

- ii) The amount stated in the Bid will, be adjusted by the Procuring Agency in accordance with the above procedure for the correction of errors. The concurrence of the Bidder shall be considered as binding upon the Bidder. If the Bidder does not accept the corrected amount, its Bid will then be rejected, and the Bid Security may be forfeited or the Bid Securing Declaration may be executed in accordance with **ITB 2.3.8**.

2.5.7. Conversion to Single Currency

- i) As per rule 32(2) of PPR-14, to facilitate evaluation and comparison, the Procuring Agency will convert all Bid prices expressed in the amounts in various currencies in which the Bid prices as follows:

For the purposes of comparison of bids quoted in different currencies, the price shall be converted into a single currency specified in the bidding documents. The rate of exchange shall be the selling rate, prevailing on the date of opening of bids specified in the bidding documents, as notified by the State Bank of Pakistan on that day, in case of holiday in State Bank of Pakistan on the day of opening financial bids, then previous working day's ex-change rates will prevail.

2.5.8. Post-Qualification & Evaluation of Bids

- i) In the absence of **prequalification**, the Procuring Agency will determine to its satisfaction whether the Bidder is qualified to perform the contract satisfactorily, in accordance with the evaluation criteria listed in BDS & pursuant to ITB Clause 2.1.3.
- ii) The determination will take into account the Bidder's financial, technical, and production/ supplying 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 2.3.6, as well as such other information required for eligibility/qualification expressed in Bid Data Sheet as the Procuring Agency deems necessary and appropriate.
- iii) The Procuring Agency will **technically evaluate** and compare the Bids which have been determined to be responsive, pursuant to ITB Clause 2.5.5, as per Technical Specifications required.
- iv) The **financial evaluation** of a Bid will be on the basis of form of Price Schedules/ Financial Bid Form 8.10 to be decided by

the Procuring Agency which must include clear cut instruction regarding item wise or package wise evaluation inclusive of prevailing taxes, duties, fees etc.

2.5.9. Contacting the Procuring Agency

- i) Subject to ITB Clause 2.5.3, 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 evaluation report is made public i.e. 10 days before the contract is awarded. If the Bidder wishes to bring additional information or has grievance to the notice of the Procuring Agency, it should do so in writing.
- ii) Any effort by a Bidder to influence the Procuring Agency during Bid evaluation, or Bid comparison may result in the rejection of the Bidder's Bid.

2.5.10. Grievance Redressal

- i) As per Rule-67 of PPR-14, Procuring Agency shall constitute a Grievance Redressed Committee (GRC) comprising of odd number of persons with proper powers and authorization to address the complaints. The GRC shall not have any of the members of the Procurement Evaluation Committee. The Committee may preferably have one subject specialist depending upon the nature of the procurement in addition to one person with legal background as per their availability to the Procuring Agency.
- ii) Any Bidder feeling aggrieved can file its written complaint against the eligibility parameters or any other terms and conditions prescribed in the Bidding documents found contrary to provision of Rule 33, and the same shall be addressed by the Procuring Agency well before the proposal submission deadline.
- iii) Any party can file its written complaint against the eligibility parameters or any other terms and conditions prescribed in the bidding documents found contrary to provision of Rule 34 and the same shall be addressed by the Procuring Agency well before the proposal submission deadline.
- iv) Any Bidder feeling aggrieved by any act of the Procuring Agency after the submission of his Bid may lodge a written complaint concerning his grievances not later than ten days after the announcement of the Final evaluation reports. In case of single stage - two envelope bidding procedure any bidder feeling aggrieved from technical evaluation may file a grievance within 5 days of announcement of the technical evaluation report. After completion of the technical evaluation process, the procuring agency shall immediately upload the technical evaluation report on the website of PPRA and Procuring Agency for obtaining/ receiving grievance petitions from the prospective bidders (if any).
- v) In case, the complaint/grievance is filed after the issuance of the final evaluation report, the complainant cannot raise any objection on technical evaluation of the report. Provided that the complainant may raise the objection on any part of the final

evaluation report in case where single stage one envelop bidding procedure is adopted.

- vi) The GRC shall investigate and decide upon the complaint within fifteen days of the receipt of the complaint. Mere fact of lodging of a complaint shall not warrant suspension of the procurement process.

2.6. Award of Contract

2.6.1. Notification of Award

- i) Prior to the expiration of the period of Bid validity, the Procuring Agency will notify the successful Bidder in writing by registered letter and by email to be confirmed in writing by registered letter, that its Bid has been accepted.
- ii) The notification of award will constitute the formation of the Contract.
- iii) Upon the successful Bidder's furnishing of the Performance Guarantee pursuant to ITB Clause 2.6.2 (i), the Procuring Agency will promptly notify each unsuccessful Bidder and will discharge its Bid security, pursuant to ITB Clause 2.3.8 (v).

2.6.2. Performance Guarantee

- i) Within fifteen (15) days of the receipt of notification of award from the Procuring Agency, the successful Bidder shall furnish the Performance Guarantee in accordance with the Conditions of Contract, in the Performance Guarantee Form provided in the Bidding documents, or in another form acceptable to the Procuring Agency.
- ii) Failure of the successful Bidder to comply with the requirement of ITB Clause (i) above or ITB Clause 2.6.3 shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid security along with other remedies available under PPR-14. After that, the Procuring Agency may decide to award the contract to the next lowest evaluated Bidder, keeping in view the Bid validity time, or call for new Bids keeping in view the concept of value for money as defined under rule-2(ae) read with Principles of Procurement as enunciated in rule-4 of PPR-14.

2.6.3. Signing of Contract/ Issuance of Purchase Order

- i) 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 or will issue the purchase order [as the case may be].
- ii) Under rule-63 of PPR-14, where the Procuring Agency requires formal signing of contract, within seven (07) days of receipt of the Contract Form, the successful Bidder shall sign and mention date of the contract and return it to the Procuring Agency.
- iii) Where no such formal signing is required by the procuring agency, the procuring agency shall issue purchase order after

the receipt of required performance guarantee, as per rule 55 of PPR-14.

2.6.4. Award Criteria

- i) Subject to ITB Clause 2.6.2, under rule-55 of PPR-14, the Procuring Agency will award the contract to the successful Bidder whose Bid has been determined to be responsive and has been determined to be the lowest evaluated Bid, provided that the Bidder has been determined to be qualified to perform the contract satisfactorily.

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

- i) The Procuring Agency reserves the right at the time of contract award to increase or decrease the quantity of goods and services originally specified in the Schedule of Requirements without any change in unit price or other terms and conditions, on the analogy of rule-59 (c)(iv) of PPR-14 (not more than 15%).

2.6.6. Procuring Agency's Right to Accept or Reject All Bids

- i) As per rule 35 of PPR-14, the Procuring Agency reserves the right to accept or reject all Bids or proposals (and to annul the Bidding process) at any time prior to the acceptance of any Bid or proposal, without thereby incurring any liability towards the Bidders.
- ii) The Bidders shall be promptly informed about the rejection of the Bids, if any
- iii) The Procuring Agency shall upon request communicate to any Bidder, the grounds for its rejection of all Bids or proposals, but shall not be required to justify those grounds.

2.6.7. Re-Bidding

- i) If the Procuring Agency rejects all the Bids under rule 35, it may proceed with the process of fresh Bidding but before doing that it shall assess the reasons for rejection and may, if necessary, revise specifications, evaluation criteria or any other condition for Bidders.

2.6.8. Corrupt or Fraudulent Practices

- i) The Procuring Agency Bidders, Suppliers, and Contractors observe the highest standard of ethics during the procurement and execution of contracts.

“Corrupt practices” in respect of procurement process, shall be as given in S-2 (d) of PPRA, Act, 2009, which is as follows:

“(d) “corrupt practice” means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official, bidder or Contractor in the procurement process or in Contract execution to the detriment of the procuring agency; or misrepresentation of facts in order to influence a procurement process or the execution of a Contract, collusive practices among bidders (prior to or after bid submission) designed to establish bid prices at artificial, noncompetitive levels and to deprive the procuring agency of the benefits of free and open competition and any request for, or solicitation of anything of value by any public official in the course of the exercise of his duty; it may include any of the following:

- i. Coercive practice by impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence the actions of a party to achieve a wrongful gain or to cause a wrongful loss to another party;
- ii. Collusive practice by arrangement between two or more parties to the procurement process or Contract execution, designed to achieve with or without the knowledge of the procuring agency to establish prices at artificial, noncompetitive levels for any wrongful gain;
- iii. Offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence the acts of another party for wrongful gain;
- iv. Any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
- v. Obstructive practice by harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process, or affect the execution of a Contract or deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements before investigators in order to materially impede an investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation, or acts intended to materially impede the exercise of inspection and audit process.”

ii) **Blacklisting & Debarment:**

Blacklisted Bidders i.e. firms/companies/sole proprietor/ general order suppliers/ JVs etc. and those found involved in “Corrupt Practices” are not allowed to participate in bidding.

Requirements & Procedure for Blacklisting & Debarment:

As per S-17A of PPRA, Act, 2009:

“17A. Blacklisting.– (1) A procuring agency may, for a specified period and in the prescribed manner, debar a bidder or Contractor

from participating in any public procurement process of the procuring agency, if the bidder or Contractor indulges in corrupt practice or any other prescribed practice.

(2) The Managing Director may, in the prescribed manner, debar a bidder or Contractor from participating in any public procurement process of all or some of the procuring agencies for a specified period.

(3) Any person, aggrieved from a decision of a procuring agency, may within prescribed period prefer a representation before the Managing Director.

(4) A procuring agency or any other person, aggrieved from a decision of the Managing Director, may within prescribed period prefer a representation before the Chairperson whose decision on such representation shall be final.]

As per rule 21 of PPR-14:

21. Blacklisting.—(1) A procuring agency may, for a specified period, debar a bidder or Contractor from participating in any public procurement process of the procuring agency, if the bidder or Contractor has:

- (a) acted in a manner detrimental to the public interest or good practices;
- (b) consistently failed to perform his obligation under the Contract;
- (c) not performed the Contract up to the mark; or
- (d) indulged in any corrupt practice.

(2) If a procuring agency debars a bidder or Contractor under sub-rule (1), the procuring agency:

- (a) shall forward the decision to the Authority for publication on the website of the Authority; and
- (b) may request the Authority to debar the bidder or Contractor for procurement of all procuring agencies.

(3) The Managing Director may debar a bidder or Contractor of any procuring agency from participating in any public procurement process of all or some of the procuring agencies for such period as the Managing Director may determine.

(4) Any person aggrieved by a declaration made under rule 20 or a decision under sub-rule (1) of this rule may, within thirty days from the date of the publication of the information on the website of the Authority, file a representation before the Managing Director and the Managing Director may pass such order on the representation as he may deem fit.

(5) Any person or procuring agency aggrieved by an order under sub-rule (3) or (4) may, within thirty days of the order, file a representation before the Chairperson and the Chairperson may pass such order on the representation as he may deem appropriate.

(6) The mechanism or process for barring a bidder or Contractor from participating in procurement process of a procuring agency, procuring agencies and a representation under this rule is specified in the Schedule appended to these rules.

SCHEDULE

see sub-rule (6) of rule 21

BLACKLISTING MECHANISM OR PROCESS

1. The procuring agency may, on information received from any resource, issue show cause notice to a bidder or Contractor.
2. The show cause notice shall contain:
 - (a) precise allegation, against the bidder or Contractor;
 - (b) the maximum period for which the procuring agency proposes to debar the bidder or Contractor from participating in any public procurement of the procuring agency; and
 - (c) the statement, if needed, about the intention of the procuring agency to make a request to the Authority for debarring the bidder or Contractor from participating in public procurements of all the procuring agencies.
3. The procuring agency shall give minimum of seven days to the bidder or Contractor for submission of written reply of the show cause notice.
4. In case, the bidder or Contractor fails to submit written reply within the requisite time, the procuring agency may issue notice for personal hearing to the bidder or Contractor/ authorize representative of the bidder or Contractor and the procuring agency shall decide the matter on the basis of available record and personal hearing, if availed.
5. In case the bidder or Contractor submits written reply of the show cause notice, the procuring agency may decide to file the matter or direct issuance of a notice to the bidder or Contractor for personal hearing.
6. The procuring agency shall give minimum of seven days to the bidder or Contractor for appearance before the specified officer of the procuring agency for personal hearing.
7. The procuring agency shall decide the matter on the basis of the available record and personal hearing of the bidder or Contractor, if availed.
8. The procuring agency shall decide the matter within fifteen days from the date of personal hearing unless the personal hearing is adjourned to a next date and in such an eventuality, the period of personal hearing shall be reckoned from the last date of personal hearing.
9. The procuring agency shall communicate to the bidder or Contractor the order of debarring the bidder or Contractor from participating in any public procurement with a statement that the bidder or Contractor may, within thirty days, prefer a representation against the order before the Managing Director of the Authority.
10. The procuring agency shall, as soon as possible, communicate the order of blacklisting to the Authority with the request to upload the information on its website.
11. If the procuring agency wants the Authority to debar the bidder or Contractor from participating in any public procurement of all procuring agencies, the procuring agency shall specify reasons

for such dispensation.

12. The Authority shall immediately publish the information and decision of blacklisting on its website.
13. In case of request of a procuring agency under para 11 or representation of any aggrieved person under rule 21, the Managing Director shall issue a notice for personal hearing to the parties and call for record of proceedings of blacklisting. The parties may file written statements and documents in support of their contentions.
14. In case of representation of any aggrieved person or procuring agency under rule 21, the Chairperson shall issue a notice for personal hearing to the parties and may call for the record of the proceedings. The parties may file written statements and documents in support of their contentions.
15. In every order of blacklisting under rule 21, the procuring agency shall record reasons of blacklisting and also reasons for short, long or medium period of blacklisting.
16. The Authority shall upload all the decisions under rule 21, available with it, on its website. But the name of a bidder or Contractor shall immediately be removed from the list of blacklisted persons on expiry of period of blacklisting or order of the competent authority to that effect, whichever is earlier.
17. An effort shall be made for electronic communication of all the notices and other documents pursuant to this mechanism or process.”

- iii) Furthermore, Bidders must keep themselves aware of the provision stated in clause 5.4 and clause 24.1 of the General Conditions of Contract.

2.6.9. Quantity and volume of the goods to be considered in mind

[Framework Contract Modality(where applicable)]

- i) While quoting the rate in a framework contract, the Bidder must consider the following facts:
 - a. Certain volume and quantity of the goods as prescribed in Bid Data Sheet.
 - b. The Bidder have to maintain the rates of the goods for the whole financial year.
 - c. The Bidder should quote the rate as per Price Schedule/ Financial Bid form. In case of non-observance of prescribed format, Financial Bid may be rejected.

CHEMICAL REACTION ENGINEERING LAB

Sr. No	Item Name	Specifications	Quantity Required	Estimated cost with all taxes (Rs.)	Total estimated cost (Rs.)
01	Fluidized Bed Reactor	Specifications The reactor system includes the following key components: ▪ A gas handling and mixing sub-system used to blend and regulate the flow of reactant gas to the bottom of the reactor. ▪ The reactor is roughly one-meter-long with a 25 mm ID. The lower portion of the reactor incorporates an easily replaced porous metal gas diffusion plate and the top of the reactor widens abruptly to form a disengaging zone for the fluidized bed. Separate heaters are provided for both the main reactor and disengaging zone. A multipoint thermocouple is provided for monitoring the internal reactor temperature distribution. ▪ A heated cyclone separator or filter is provided immediately downstream of the reactor to capture the fines resulting from particle attrition. The reaction products are then cooled by a condenser and collected in a product receiver. ▪ The system pressure is maintained by pressure regulator. ▪ Gas feed to the reactor is controlled manual by the adjustment of flowmeter valves. ▪ The pressure is monitored by pressure gauges and also possible to be displayed digitally. Temperature of the reactor chamber is monitored at different location in the column and can be digital controlled and maintained by a Process Controller. ▪ Software and PC Core i5 13th Generation 08 GB Ram 1 TB Hard Disk, 19.5” Display or higher compatible with equipment. Reactor Internal diameter: 25mm Length: 1000mm Material: stainless steel Base porous plate: brass Porous plate diameter: ~25mm Insulation Thickness: 3~4” Type: ceramic with lockable painted steel sheet box Heater Total Power: ~5000W Cyclone Separator Material: stainless steel Working pressure: -0.5~20bar Operating Temperature: -15~350°C Condenser Material: Stainless steel Type: concentric Heat Transfer surface area: 0.1-0.2 m² Receiver	1	1045000/- As per PC-1	1045000/- As per PC-1

CHEMICAL REACTION ENGINEERING LAB

		Material: Stainless Steel Capacity: 500-1000ml Measuring Ranges Thermocouple Type: K Range: -100°C~500°C Reactor Inlet Pressure Type: Gauge Range: 0~10bar Condenser flowmeter Type: Variable Area Rotameter Range: 0.4~10lpm Gas Inlet Flowmeter Type: Variable Area Rotameter Range: 1~15lpm			
02	Continuous Stirred Tanks in Series	Specifications ➤ 3 identical stirred tank reactors made of glass connected in series ➤ Chambered bottom made of stainless steel as heat exchanger ➤ Delivery between stirred tanks via 2 peristaltic pumps ➤ Small reactor capacity for less consumption of chemicals ➤ Sensor for measuring the conductivity and temperature ➤ Display of conductivity and temperature ➤ Temperature control in the reactor ➤ Software and PC Core i5 13th Generation 08 GB Ram 1 TB Hard Disk, 19.5" Display or higher compatible with equipment. Technical data 3 reactors Height: 250-500mm Reactor capacity: 1500-2000mL/min Material: boro 3.3 glass, Stainless steel Stirrer Speed: approx. 300min ⁻¹ Drive: variable speed Brushless geared motor Peristaltic pump for reactants and products Max. flow rate: approx. 2000mL/min Speed: 500-1000 RPM Derive: Variable Water pump Max. flow rate: 10-15L/min Max. head: 10-30m Power consumption: 100-500W Tanks	1	1723000/- As per PC-1	1723000/- As per PC-1

CHEMICAL REACTION ENGINEERING LAB

		Vessel: 2-5L Heating water: 8-25L Measuring ranges Conductivity: 0~200mS/cm Temperature: 0~60°C Heater Power consumption: 1000-5000W Service Unit Specifications: • Bench-top framework of material with good strength etc • 2 tanks of stainless steel or glass type with capacity of 4-5 litres/each, for feeding reagents • 2 peristaltic feeding pumps, • Circulation pump of for hot water, with electronic temperature control and safety thermostat • Digital conductivity meter with sensor • Electric switchboard • Displays for pumps, stirring rate and electronic thermostat • Software and PC Core i5 13th Generation 08 GB Ram 1 TB Hard Disk, 19.5" Display or higher compatible with equipment. Technical data Peristaltic pump for reactants and products Max. Flow rate: approx. ~2000mL/min Speed: 500-1000rpm Drive: Variable Speed Water pump Max. Flow rate: 10-15L/min, Max. Head: 25-30m Power consumption: 500-1000W Heater Power consumption: 4500W Measuring ranges Conductivity: 0~200mS/cm Temperature: 0~60°C			
03	Fixed Bed Catalysis	Specifications Investigation of catalytic reactions ▪ 3 reactors for comparison of various fixed bed catalysis ▪ Peristaltic pump with adjustable speed to transport the reactant into the reactors ▪ Regulated heating circuit with water tank, heater and pump to regulate the reactor temperatures ▪ 1 scaled container for reactant and product respectively ▪ Software and PC Core i5 13th Generation 08 GB Ram 1 TB Hard Disk, 19.5" Display or higher compatible with equipment. ▪ Photometer for analysis of the product (optional) Technical Data Reactors Diameter: 10-20mm	1	1491000/- As per PC-1	1491000/- As per PC-1

CHEMICAL REACTION ENGINEERING LAB

		Height: approx. 100-150mm Peristaltic pump Max. flow rate: approx. 50-100mL/min Heating circuit pump Max. flow rate: 10-15L/min Max. head: 20-30m Power consumption: 100-150W Heating circuit Tank: approx. 10-15L Heater: approx. max. 1kW Tanks for reactant and product Capacity: approx. 2000mL Recommended accessories Photometer (Optional)			
04	Service Unit for Chemical Reactors	Specifications: - Bench-top framework of material with good strength etc 2 tanks of stainless steel or glass type with capacity of 4-5 litres/each, for feeding reagents 2 peristaltic feeding pumps, - Circulation pump of for hot water, with electronic temperature control and safety thermostat - Digital conductivity meter with sensor - Electric switchboard - Displays for pumps, stirring rate and electronic thermostat - Software and PC Core i5 13th Generation 08 GB Ram 1 TB Hard Disk, 19.5" Display or higher compatible with equipment. - Must be compatible with Elettronica Veneta Reactors especially for CSTR (CR1/EV), PFR (CR2/EV) and Batch Reactor (CR3/EV) Technical data Peristaltic pump for reactants and products Max. Flow rate: approx. ~2000mL/min Speed: 500-1000rpm Drive: Variable Speed Water pump Max. Flow rate: 10-15L/min, Max. Head: 25-30m Power consumption: 500-1000W Heater Power consumption: 4500W Measuring ranges Conductivity: 0~200mS/cm Temperature: 0~60°C	2	3025000/- As per PC-1	6050000/- As per PC-1

Energy Engineering Lab

Sr no.	Item name	Specifications	Quantity required	Estimated cost with all taxes (Rs.)	Total estimated cost (Rs.)
1	Softening Point Apparatus	Heating Rate : $(5 \pm 0.5)^\circ\text{C} / \text{Min}$ Measuring Range : -5-270 Degree	01	275000/- As per PC-1	275000/- As per PC-1
2	Pensky Martin Apparatus	Heating Rate : (1-12) C/Min Electric ignition. Gas flame diameter : 3.2mm ~ 4.8mm	01	330000/- As per PC-1	330000/- As per PC-1
3	Saybolt Viscometer	Constant temp. tank : dia.160x100mm Sample tube : inner diameter 40mm Orifice diameter : dia.3mm, dia. 45mm, dia.5mm, dia. 10mm	01	770000/- As per PC-1	770000/- As per PC-1
4	Digital Cleveland Apparatus	1. Power supply: AC $(220 \pm 10\%)$ V, 50Hz. 2. Heating device: Electric furnace heating, no naked fire, explosion prevented. The power is adjustable from 0W to 600W. The max heating temperature can reach 400°C . 3. Temperature control: Single chip microcomputer. The heating rate can meet requirements of standards GB/T 3536-2008 and ASTM D92. 4. Temperature display: LCD shows temperature parameters. The display range is $0^\circ\text{C} \sim 400^\circ\text{C}$, display accuracy is 0.1°C . 5. Flash point detecting device: It applies the test flame automatically. 6. Temperature sensor: RTD, PT100	01	605000/- As per PC-1	605000/- As per PC-1
5	Gas Calorimeter	1. Stainless steel inner water cylinder 2. Equipped with electric stirrer in the water tank 3. Double-layer external container	01	990000/- As per PC-1	990000/- As per PC-1

		4.High uniformity of water temperature to meet the requirement of test Heat capacity (14400~14500) J/K Resolution 0.001 K Measurement accuracy ≤ 60 J/g Display LED Repeatability error $\leq 0.2\%$ (Grade C) Pressure endurance of bomb 20 MPa Power ≤ 150 W Power Supply 220V, 50Hz			
6	Swelling Index Apparatus	Specifications• One loading unit• hand operated 5 tons capacity with two rates of travel One high sensitivity Proving Ring 250 kg capacity with calibration chart and carrying case• One dial gauge 0.01 mm x 25 mm• One Gun Metal mould 1000ml. capacity. (100mm dia x 127.3 mm high) with collar and baseplate and a pair of porous stones 100 mm dia x12.7 mm thick• One Gun metal /brass perforated swell plate 100mm dia x 16 mm thick. One spacer 100 mm dia x12.7 mm thick one load transfer bar and one steelball• One soaking tank 250 mm dia x 210 mm high	01	550000/- As per PC-1	550000/- As per PC-1
7	Portable Multi Fuel Analyzer	Properties Predicted: Diesel Density / API Gravity, Distillation Fractions, Cetane Index, Viscosity, Flash Point, Cloud Point, Aromatics & Saturates Jet Fuel Density / API Gravity, Distillation Fractions, Freeze Point, Flash Point Fuel System Icing Inhibitor, Aromatics & Saturates, Hydrogen Content Gasoline Density / API Gravity, Distillation Fractions, Ethanol & MTBE, BTEX, Reid Vapor Pressure, Octane	01	1650000/- As per PC-1	1650000/- As per PC-1

MUHAMMAD NAWAZ SHARIF
UNIVERSITY OF ENGINEERING & TECHNOLOGY, MULTAN
INSTRUMENTATION AND CONTROL LAB

Sr #	Name of item	Specifications	Qty	Estimated cost with all taxes														
1	INSTRUMENT AIR PREPRATION UNIT	Main metallic elements made of stainless steel. Transparent elements for a better observation of the process. The unit must includes wheels to facilitate its mobility. The control system includes, • Process interface • Process controller • Digital Display Module • Control and monitoring software The major parts of an instrument air supply system are: • The Electric motor • The Compressor • The Inlet Air Filter • The After Cooler • The Moisture Separator • The Condensate Trap • The Air Receiver • The Safety Relief Valve • The Pressure Gauge • The Oil Remover • The Dryers • The Air Distribution System <u>Instrument air specifications</u> <table><tr><td>Particle (class 6/ISO 8573:2010)</td><td>≤ 100.000 solid particle ... 5 μm]</td></tr><tr><td>Water vapor (class 4/ ISO 8573:2010)</td><td>≤ +3 °C pressure dew point (steam)</td></tr><tr><td>Total oil portion (class X/ ISO 8573:2010)</td><td>≤ 10 mg total oil (liquid, aerosol, fog)</td></tr><tr><td>Flow rate</td><td>1.3 Nm³/h</td></tr><tr><td>Pressure</td><td>12.5 bar</td></tr><tr><td>Operating temperature</td><td>1 ... 60 °C</td></tr><tr><td>Volume</td><td>1.5 lit</td></tr></table>	Particle (class 6/ISO 8573:2010)	≤ 100.000 solid particle ... 5 μm]	Water vapor (class 4/ ISO 8573:2010)	≤ +3 °C pressure dew point (steam)	Total oil portion (class X/ ISO 8573:2010)	≤ 10 mg total oil (liquid, aerosol, fog)	Flow rate	1.3 Nm ³ /h	Pressure	12.5 bar	Operating temperature	1 ... 60 °C	Volume	1.5 lit	01	2,200,000/-
Particle (class 6/ISO 8573:2010)	≤ 100.000 solid particle ... 5 μm]																	
Water vapor (class 4/ ISO 8573:2010)	≤ +3 °C pressure dew point (steam)																	
Total oil portion (class X/ ISO 8573:2010)	≤ 10 mg total oil (liquid, aerosol, fog)																	
Flow rate	1.3 Nm ³ /h																	
Pressure	12.5 bar																	
Operating temperature	1 ... 60 °C																	
Volume	1.5 lit																	

MUHAMMAD NAWAZ SHARIF
UNIVERSITY OF ENGINEERING & TECHNOLOGY, MULTAN
INSTRUMENTATION AND CONTROL LAB

2	HEAT EXCHANGER STATION	All required technical data Software with all accessories (if available) Instructions and Lab manuals. Experiment guide Main metallic elements made of stainless steel. Transparent elements for a better observation of the process. The unit must includes wheels to facilitate its mobility. The control system includes, • Process interface • Process controller • Digital Display Module • Control and monitoring software The stations include: -A heat exchanger to transfer the energy between systems -A controller which can provide individual heat exchanger control, be linked to control multiple units and be connected to a building management system over-ride -Pressure independent control valve for flow and motorised control in a dynamic pressure system -An MID approved ultrasonic energy meter for measurement, monitoring and billing accurate consumption data -A commissioning valve for measurement of flow -A secondary side safety valve -Primary and secondary strainers -Ball or butterfly isolation valves. <u>specifications</u> Station details : Pipework Sizes DN40–200 Maximum permissible supply temperature 95°C PN Rating 16bar Flow Rate Range 0.83 l/s to 40 l/s Maximum Dierential Pressure (Primary) 4 bar/6bar if con-rmed by Danfoss Safety Valve Rating (secondary) 6bar standard Controller supply voltage 230V Pump output 3ph 0.4 – 4.0kW Temperature gauge range 0–120 °C Pressure gauge range 0–16 bar	01	1,750,000/
TOTAL COST			3,950,000/- PKR	

Mass Transfer Lab

Sr. No.	Name of Item	Specification	Qty	Estimated Cost with all taxes (Rs.)	Total Estimated Cost (Rs.)
1	Continuous Distillation Unit	Specifications • Continuous rectification with different types of columns available as optional • Interchangeable columns • Vacuum mode possible using vacuum pump • Electrically heated evaporator with infinitely varied power • Tanks for feed, bottom and top product • Heat exchanger for bottom product cooling/heating due to feed preheating or cooling water • Condenser and phase separation tank for top product • All tanks made of glass and stainless steel • Adjustment of reflux ratio using valves • Different temperature sensors per column • Pressure gauge to measure the vacuum in the system Technical Data Feed pump max. flow rate: 400mL/min speed: variable Vacuum pump Final vacuum: 200mbar Tanks Feed: approx.: 10L Boiler: approx.: 7L Top Product tank: approx.: 5L Bottom Product tank: approx.: 5L Phase separation tank approx.: 0.5L Condenser/heat exchanger Top product condenser material: glass type: shell and coiled Pre-heating condenser material:	1	1.153M	1.153M

		Stainless Steel type: concentric tube Rotameter Top Product condenser: 1~7 lpm Measuring ranges temperature: -100~400°C reflux ratio: 0~100% heating power: 0~2kW column differential pressure: 0~250mbar cooling water flow rate: 1~7lpm system pressure gauge: - 1~1bar Software specially designed in National Instrument™, LABVIEW™ environment to measure and calculate the results of apparatus. The software is optional and while using the software a set of electronic sensors is included. The software can be run with any Windows™ environment. PC Core i5 13th Generation 08 GB Ram 1 TB Hard Disk, 19.5" Display or higher along with the compatibility with equipment.			
2	Anaerobic Packed Bed Reactor	Specifications • Anodized aluminium structure and panels in painted steel and HDF. • Main metallic elements in stainless steel. • Packed anaerobic digesters of 7.5L capacity each. • Methane (CH₄) sensor to measure its concentration in the generated biogas, 0~100%. • Carbon dioxide (CO₂) sensor to measure its concentration in the generated biogas, 0~100%. • 2pH meters, range: 0~14. • Temperature sensors, "K" type. • Industrial grade CO₂, CH₄ sensors Reactors packing: ♣ 25mm diameter bacto balls. ♣ Heating blanket with a thermostat and a temperature probe to control the heating temperature. temperature	1	1.554M	1.554M

		range: 0~100oC. ♣ 4 Peristaltic pumps. Feeding flows measurement by the pumps calibration. ♣ 2 Volumetric tanks for the storage and volume measurement of the generated biogas. ♣ Buffer vessel, of 2L capacity. ♣ 2 high density polyethylene vessels, of 3L capacity, for the acid and the base. Electronic console: ♣ Temperature Digital display for the temperature sensors. ♣ Methane and carbon dioxide sensor Digital display. ♣ Pumps switches. ♣ Pumps controllers. ♣ Heating blankets switches. ♣ Cables and Accessories, for normal operation Technical Data 2 peristaltic pumps for biological process. Range: 0~15mL/min 2 peristaltic pumps for introduction of acid and base. Range: 0~15mL/min 2 Digesters tanks made of glass with circulation of hot water jacket: Capacity: 7.5L Intermediate buffer tank: Capacity: 2L CH₄ sensor and CO₂ sensor with digital display Range: 0~100% both Heating mechanism A heating mat with thermostat for controlling and maintaining temperature Range: 0~100oC 2 Volumetric tanks 3:2 liters each (upper and lower positions) Measuring ranges Temperature: -100~400oC pH: 0~14 CH₄: 0~100% CO₂: 0~100%			
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		Software specially designed in National Instrument™, LABVIEW™ environment to measure and calculate the results of apparatus. The software is optional and while using the software a set of electronic sensors is included. The software can be run with any Windows™ environment. PC Core i5 13th Generation 08 GB Ram 1 TB Hard Disk, 19.5" Display or higher along with the compatibility with equipment.			
3	Laboratory steam generator	Specification ♣ A floor standing continuous steam generator ♣ Splash proof electrical enclosure and switches ♣ Solid state level control on feed water tank ♣ Easy and safe access for maintenance and inspection, with door isolator to the main electrical enclosure ♣ Simple controls allow for quick startup and shutdown procedures ♣ Rapid start up to full pressure and will deliver steam during heating process ♣ Automatic top up of feed tank and boiler during normal use ♣ Normal domestic water supply sufficient for normal operation ♣ Low water and high -pressure alarms cut power to heating element to prevent unsafe conditions ♣ Emergency switch on front of unit for safety during maintenance ♣ Pressure relief valve in case of over pressurization to prevent energetic discharge ♣ Two pressure switches are installed in case of pressurization to cut off power to heaters. ♣ Four independent steam outputs ♣ A comprehensive instruction manual	1	3.105M	3.105M

		Technical Data Steam generator pressure vessel volume: 50L steam output: 15kg/h operating pressure: 5bar at 158°C max. pressure: 8.5bar Steam valves with output ports: 4 Heater Heater power: 6kW Measuring ranges Pressure: 0~10bar Temperature: -100~400 o C			
4	Permeability/Fluidization Studies Apparatus	Specification ♣ Apparatus to verify Darcy's law, to examine Kozeny's equation and to observe liquid fluidization behavior of a granular bed ♣ Equipment consists of a metal framework, constant head tank and transparent test section for observation ♣ Flow is indicated by a rotameter ♣ A 0.5m water differential manometer and 0.5m mercury manometer are included for pressure drop across the bed Technical Data Sample tube I/D: 38mm Sample tube length: 507mm Flow meter range: 50 -800 ml/min 0.5m water differential manometer 0.5m mercury manometer Mercury thermometer Alternative bed materials (e.g. sand, anthracite)	1	2.589M	2.589M
5	Spray Drying Unit	Specification • Floor standing spray dryer for processing aqueous emulsions, solutions, suspensions and colloids • Downward co-current operation (a fine jet of the liquid is brought into contact with a hot air stream) • Incorporates manual jet de -blocking device • The unit is supplied complete; ready for operation. • Materials of construction: stainless steel, pvc and glass	1	3.279M	3.279M

		• Dryer components: Glass with gasket -free ground glass flanges • Digital controller and display of inlet temperature • Digital display of outlet temperature • Rotary knob to control pump speed • On/off switches for the blower, heater, and mains supply Technical Data Product flow rate Range:0~1.5L/h Air inlet temperature: Range:0~200°C Heater Capacity: 3kW Drying airflow Range: upto75 m³/h Jet: Diameter: 0.4~0.6mm			
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Post Graduate Lab

Sr #	Equipment Name	Specifications	Quantity	Estimated Cost (in Millions)
1	FT-IR Spectrophotometer:	Wavenumber Range 7800-375 cm ⁻¹ Resolution 1cm Signal Noise Ratio 30000:1 (resolution@4cm, sample and background scan for 1 min@2100cm ⁻¹) Detector High performance DLATGS Beam splitter Coated KBr Light Source Long life, steady state infrared emitter Electronic System 24bit A/D converter at 500KHz, USB 2.0 Power 100-240VAC, 50/60Hz FTIR Spectrometer is a Fourier-transform infrared spectrometer with fast scan speed and high accuracy. This instrument is operated by a PC with user friendly software and a comprehensive manual. It is a valuable tool for various analytical applications in fields such as chemistry, medicine, food and beverage, wine industry, material engineering and quality process control. The optical system is highly stable owing to the dedicated design. Highly stable optical bench with no need for adjustment or maintenance of optical path. Precision machinery ensures high scanning repeatability. Corner cube optics provides easy operation, removing complicated electronics and additional moving parts. Dynamic collimation system and movable mirror driving system keep the interferometer at optimum situation. Voice-coil driver and precision slide ensure the performance of the system under severe conditions. A container of desiccant that protects the beam splitter and other optical components from moisture invasion.	01	8.91
2	Thermogravimetric Analyzer	Temperature Range RT.~1550°C, Temperature Resolution 0.01°C, Temperature Fluctuation ±0.1°C	01	3.4

		Heating Rate 0.1~100°C/min, Temperature Control Mode PID control, heating, constant temperature and cooling, Program Control Program setting multi-stage temperature rise and constant temperature, and five sections can be set at the same time Balance Measuring Range 0.01mg~3g, which can be extended to 50g, Precision 0.01mg Constant Temperature Time Program control, 0-300min, which can be extended to 72h Resolution 0.1µg, Display: LCD display, 7-inch full-color 24bit touch screen Atmosphere Device Built-in gas flow meter, including two-way gas switching and flow control Software Intelligent software can automatically record TG curve for data processing, TG / DTG, mass, percentage coordinates can be arbitrarily switched; Software with automatic adjustment function, according to the map display, automatic extension, scaling Gas Path Can be set with multi-stage automatic switching without manual adjustment. Data InterfaceStandard USB interface, special software (software upgrade for free from time to time) Curve Scanning Heating scanning and cooling scanning Test Map Five test maps can be opened at the same time for comparative analysis Cooling Time ≤15min, 1000°C~RT.; Air cooled cooling device is selected to reduce temperature quickly and improve test efficiency Crucible Type Ceramic crucible, aluminum crucible Structural: The heating of the furnace		
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		body is made of custom-made nickel-chromium wire doublerow winding, which reduces interference and is more resistant to high temperature. Tray sensor, made of alloy wire, has the advantages of high temperature resistance, oxidation resistance, corrosion resistance, etc. The power supply and circulation cooling part are separated from the host to reduce the influence of heat and vibration on the micro-thermal balance. The upper-opening structure is adopted, which is easy to operate. The host adopts water thermostatic device to isolate the thermal influence of the heating furnace body on the chassis and microthermal balance. The furnace body can be replaced according to customer requirements. Controller, software: Adopts imported ARM processor, faster sampling speed, processing speed. The four-way sampling AD collects TG signal and temperature T signal. Heating control, using PID algorithm, precise control. Can be multi-stage heating, constant temperature. Two-way USB communication is adopted between the software and the instrument to fully realize remote operation, and the parameter setting of the instrument and the operation and stop of the instrument can be performed through the computer software. 7-inch full-color 24bit touch screen, better manmachine interface. calibration can be realized on the touch screen. Electricity AC220/110V, 50/60Hz		
3	Gas Chromatography and Mass Spectrometry	Gas Chromatograph Flow Control: Constant Flow, Constant Pressure, constant linear velocity Oven temperature: Ambient +2 to 450 oC Sample Injection Unit Temperature: 450oC maximum Injection Port Temperature: 450oC	01	16.2

		maximum AFC Pressure Range: 1035 kPa maximum Retention Time Repeatability: <0.0008 min*1 Peak Area Repeatability: <1% RSD*1 Oven Ramp Rate: Max 120 oC/min*2 Mass Spectrometer: GCMS Interface Type: Direct connection with capillary column Temperature: 50 oC to 350 oC Ion Source Type: Front access for easy maintenance Ionization: EI (CI models are capable for CI and NCI models are capable for CI and NCI) Filament: Dual, Automatic switching Electron Energy: 10 to 200 eV Electron Current: 5 to 250 µA Mass Analyzer and Detector Mass Analyzer: Metal quadropole with pre--rod Mass Range: m/z 1.5 to 1090 Possible setting of FWHM: 0.4 to 2.0 u Stability: +/- 0.1 u/48 hours (constant temperature) High-Speed Scan Control: Advanced Scanning Speed Protocol High-Speed Scan Rate: 20000 u/sec Minimum measurement intervals: 0.01 s (100scan/sec maximum) Detector: Electron multiplier with low noise overdrive lens 8 x 10⁶ (dynamic range) Pump: 190 L/sec /170 L/sec (He) Turbomolecular pump differential exhaust system Auxiliary Pump: 30 L/min (60Hz) oil rotary pump Column Flow rate: 15 mL/min maximum (He) Carrier Gas: Helium, hydrogen, nitrogen		
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		DI Probe (option) Temperature: room temperature to 500 oC Software Measurement Mode: Scan, SIM FASST (Simultaneous scan/SIM measurement) SIM channel: 64 Channels * 128 Groups Energy Savings: Ecology Mode Insert replacement: Easy Stop Method Wizard: Smart SIM*3 (automatic SIM table creation) AART (Automatic Adjustment of Retention time) Library search: Similarity searches using retention indices (compatible with multiple retention index group) up to 10 libraries can be configured Instrument tuning: Automatic (EI, CI, NCI) Quality control: Accuracy control QA/QC function, instrument control system check function, user control security function Measurement Data Control: Optimal compound structure format for GLP Maintenance Support: MS Navigator Report: Flexible report creation, templates Demonstration of Performance EI Scan S/N: 1pg Octafluoronaphthalene m/z 272 S/N $\geq$ 2000 (Helium Carrier gas), S/N $\geq$ 300 (Hydrogen carrier gas) EI 20,000 u/sec Scan IDL: 1pg Octafluoronaphthalene m/z 272 IDL $\leq$ 500 fg (Helium Carrier gas), Installation Checkout Criteria (Helium Carrier Gas): EI SIM IDL: 100fg Octafluoronaphthalene m/z 272 IDL $\leq$ 10 fg CI Scan S/N: 100 pg Benzophenone m/z 183 S/N $\geq$ 1200 NCI Scan S/N: 100fg Octafluoronaphthalene m/z 272 S/N		
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		≥1000		
4	Portable pH/ Conductivity/DO Meter	Large LCD to display multiple parameters simultaneously: pH, Conductivity or TDS or Salinity, Dissolved oxygen, Temperature Water proof function as IP67 Fast measuring of dissolved oxygen value Auto ranging for conductivity measurement pH Measuring Range 2.00~12.00, pH Resolution 0.01 Conductivity Measuring Range 0~199.9, 0~1999 us/cm 0~19.99, 0~150.0 ms/cm Conductivity Resolution 0.1 us/cm, 1 us/cm, 0.01ms/cm, 0.1 ms/cm Conductivity Accuracy ±1% of F.S ±1 digit TDS Measuring Range 0~199.9*f, 0~1999*f ppm, 0~19.99*f, 0~150.0*f ppt (f is TDS factor) TDS Resolution ±1% of F.S ±1 digit, TDS Accuracy 0.1, 1 ppm, 0.01, 0.1 ppt TDS Factor 0.30~1.00, Salinity Measuring Range 0~10.00 ppt, 0~42.0 ppt (SEA Water) Salinity Resolution 0.01 ppt, 0.1 ppt Salinity Accuracy ±1% of F.S ±1 digit D.O Measuring Range 0.0~199.9% (0.0~30.0mg/L), D.O. Resolution 0.1 D.O. Accuracy ±3% of F.S ±1 digit Temperature Measuring Range - 5~60.0°C Temperature Resolution 0.1 Temperature Accuracy ±0.5°C Auto temperature compensation (ATC) 99 points memories w/recall function Temperature unit °C/°F is switchable 1 hour auto power off Excellent to use in fresh or sea water aqua farm Operating Temperature 0~50°C Operating RH% Humidity <80% Storage Temperature 0~60°C	02	2
5	Heating/Circulating	Chamber volume 30 L	01	0.1

	Bath	Temperature range RT (+ 5 °C ~ 70 °C) Temperature stability ± 0.3 °C Timing range 1~999 min Controller type Digital Power consumption 1000 W Power 220 V ; 50 Hz		
6	Digital Burette	Volume Range 0.01 mL to 99.99 mL Volume Increment 100 μL Volume Accuracy R = 0.2%, CV = 0.07% Max Piston Lift 10 mL Resolution 10 μL Speed Levels 16 stages Operating Temperature Range 10°C to 30°C Control Type External control Charging Time 4 hours Working Time 5 hours Power Battery: 4000 mA/h	01	0.1
7	Standard Fume Hood	Silent turbine fan draws chemical vapors from bottles into a HEPA filter with high absorption capacity. No static, no spark and super silence motor. Various type filters to realize 99.99% high efficiently filtering. Lighting system are controlled by control panel. The main material is ≥ 1.2mm galvanized steel plate, electrostatically sprayed with epoxy resin, and covered with a durable chemical-resistant lead-free coating to maintain a high finish and minimize the impact of corrosion and moisture. LED lighting power equivalent to 25W fluorescent lamp, no heat, safety, and does not affect the experimental environment temperature, energy saving, environmental protection, long life. Transparent acrylic glass >6mm thickness with good anti-corrosive performance. Two operation holes, reverse sash window design, easy to access.	01	1.033

		Filters (pcs): 4 Pre filters (pcs): 2 Fans (pc): 1 LED Lamp (pc): 1 Display screen: 7 inch LCD touch screen Worktable: Epoxy resin board Power cord (pc): 1 Control system (unit): 1 Alarm System: VOC alarm, temperature and humidity alarm Advanced VOC Detector port detects pollution in time, with special alarm system. Unique designed LED touch screen control system, which combine all data in one piece computer control panel, easy to control fan speed and lighting, etc and convenient to set up and monitor all data. Internal workspace: 77*57*92cm Air Capacity (m³/h): 230m³/h Face velocity: 0.4-0.6m/s Voltage: 110V-240V Frequency: 50-60Hz Power: 42w Rated current: 2A Volume: 40-52 dBA Operation hole: Trapezoid		
8	Water Quality Kit	Alkalinity (as CaCO₃) Method: titration Range: 0-100 mg/L (ppm) 0-300 mg/L (ppm) Smallest Increment: 1mg/L(ppm) 3mg/L(ppm) Chemical Method: phenolphthalein/bromophenol blue #Tests: 110 avg. Chloride Method: titration Range: 0-100mg/L(ppm) 0-1000mg/L(ppm) Smallest Increment: 1mg/L(ppm) 10mg/L(ppm) Chemical Method: mercuricnitrate #Tests: 110 avg. Hardness (as CaCO₃) Method: titration Range: 0.0-30.0 mg/L(ppm) 0-300mg/L(ppm)	01	0.7

		Smallest Increment: 0.3mg/L(ppm) 3mg/L(ppm) Chemical Method: EDTA #Tests: 100 avg. Iron Method: colorimetric Range: 0-5 mg/L (ppm) Smallest Increment: 1 mg/L (ppm) Chemical Method: phenanthroline #Tests: 50 pH Method: electronic pH tester Range: 0.0-14.0pH Smallest Increment: 0.1pH #Tests: life of the meter Sulfite (as Na₂SO₃) Method: titration Range: 0.0-20.0mg/L(ppm) 0-200mg/L(ppm) Smallest Increment: 0.2 mg/L(ppm) 2 mg/L(ppm) Chemical Method: iodometric #Tests: 110 avg.		
9	Dead End Filtration Cell	Specifications: Membrane size: 47-mm diameter (1.5 in) Active membrane area: 14.6 cm² Processing Volume: 300 mL Hold up volume: 01 mL Maximum Pressure: 69 bar (1000 psi) Maximum Temperature: 121 °C at 55 bar pH range: Membrane dependent Connections: Permeate Outlet: 1/8-Inch diameter 316L SS tubing Pressure Inlet: ¼ Inch FNPT Wetted Materials of Construction: Cell Body: 316L Stainless Steel O-Rings: Buna-N Gaskets: Buna-N Stir Bar: PTFE-coated magnet	01	0.6
10	Elcometer (Film Applicator bottom Heating Bed)	Power supply: Voltage single phase 100~240VAC, frequency 50/60Hz, power 230W	01	2

		Heat-able Vacuum Platform · Vacuum chuck is made of aluminum alloy with the micro-size holes · Vacuum chuck Area: 200 mm (L) x 130 mm (W) · The heating elements are preinstalled inside the chuck · Digital temperature controller (single point) with +/- 1°C accuracy · The maximum temperature is 100°C Top Cover: Top cover is included Vacuum Pump · One 24VDC pump is included. · The vacuum gets power from the coater. · 8mm O.D. tube fitting for vacuum chuck connection. Film Applicator · Built in pushing bar for using micrometer adjustable applicator · A fixed-thickness film applicator with various thickness (5μm,10μm,15μm,20μm) is included for immediate use · Maximum coating width of the standard film applicator is 80 mm · The DC 24 V motor drives the pushing bar continuously to the adjustable position · A waste plate for extra slurry is included. Slurry Boat A stainless steel slurry boat is included Maximum Coating Area		
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		200 mm (L) x 100 mm (W) Accuracy of Film Thickness +/- 2um Traverse Speed and Distance · Travel Speed: 0 - 50 mm/s adjustable · Travel Distance: 0 - 360 mm adjustable		
11	Cross Flow membrane filtration Unit	• Vessel volume 1L • Maximum Operating Pressure 40 bar Retentate control temperature range 5-60°C • Filter size 90mm • Rapid determination of the best membrane for a particular product for efficient process development • Small-scale, only one litre of material is required • Simple cleaning and maintenance protocols • Ability to determine effect of operating parameters on flux profiles • Uses a standard filtration size of 90mm enabling a wide range of filtration membranes to be used • Supplied with a range of polymer membranes • Suitable for microfiltration, ultrafiltration, nanofiltration and reverse osmosis membranes and pressures. Pressure operating range 0-40 bar • Variable retentate cross flow velocity over the filtration membrane • Data logging of filtration pressure, permeate mass, retentate flow rate, retentate temperature (optional) • Electronic balance to measure filtration performance (optional)	01	1.5

		• Buffer addition / Diafiltration capabilities • Optional retentate temperature control • Optional ceramic membrane available		
12	Thermal Properties Meter	Accuracy: • ± 5 to $\pm 10\%$ Thermal Conductivity/Resistivity • $\pm 10\%$ Specific Heat • $\pm 10\%$ Thermal Diffusivity Measurement Speed: 1, 2, 5, & 10 min. read times Data Storage: 4,095 readings, flash memory Compliance to Standards: IEEE Standard 442-1981 and ASTM Standard D5334-08 Operating Environment of Sensors: -50 to 150°C Battery Source: 4 x AA Auto-Read Mode Users can collect unattended data at user-defined intervals in the auto-read mode Type: Ultra low-power 16-bit micro-controller w/ 24-bit A/D converter Display: Liquid Crystal Display (LCD) 7.5 cm x 4 cm • Included Accessories: KS-1 Thermal Conductivity/Resistivity sensor (for liquids) • TR-1 Thermal Conductivity/Resistivity sensor (for solids) • SH-1 Dual-needle Thermal Properties sensor • User's manual • Pelican carrying case • Readout stand • Performance verification standards • Thermal grease • Drill bit for drilling pilot holes in materials	01	5.424

		• Concrete pilot pin • RS232 cable • Calibration Each instrument comes factory calibrated and includes performance verification standards • Range of Measurements K: 0.02 to 4 Wm⁻¹ C⁻¹ • D: 0.1 to 1.0 mm²s⁻¹ • R: 0.25 to 50mC W⁻¹ • C: 0.5 to 4 MJ m⁻³ C⁻¹ * Accuracy and measurement range vary with sensor type. See Sensor(s) Information.		
13	Pervaporation setup consisting of peristaltic pump with cross flow cell	Scope of supply The scope of supply for lab scale pervaporation test unit: • Pervaporation benchtop system: skid mounted on wheels, with leak reservoir • Vessels, heat exchangers, circulation pump, vacuum pump, chiller, valves, sensors • Manual, documentation and CE certificate • All-in-one PC • Software for control & logging of process parameters, experimental set-up and data acquisition • FAT and SAT included: • Membranes, modules, seals (these are quoted separately) • Electricity supply, nitrogen supply • Site works General specifications • Feed flow rate: 100-300 liter/hour • Feed pressure range: maximum 10 barg • Feed operating temperature: 40 °C – 190 °C • In-line heating • Tubing and vessel material: stainless steel 1.4404 (SS316L), isolated • Sealing material: EPDM-PC or FFKM • Vacuum: minimum 3 mbar	01	01

		• Feed vessels: 5-50 liter, isolated, under nitrogen atmosphere, with forced cooling • Fractionated condensation: - Condenser: cooling by for example chilled water/glycol - Glass permeate collection vessel or SS316L vessel with level control - Followed by: Cold trap with dry ice or liquid nitrogen for collection of low boiling permeates • Feed composition includes water, solvents, organic acids • Measurement of feed flow rate, pressure, vacuum and temperature • Pressure safety valve • Emergency stop • Possibility to flush with nitrogen • Skid mounted, to be placed in a fume hood. • Electrical: 400 V / 50 Hz		

PROCESS LAB

Sr. No	Name of Item	Specification	Qty	Total Estimated Cost (Rs.)
1	Tube Furnace	Reactor Alumina Tube: Alumina tube OD 40mm , ID 30mm and Length: 1000mm Type: Bench Type: Electric resistance vacuum tube furnace Furnace structure: Chamber material, temperature controller system, heating element, furnace shell and other assistant parts Rated Max temperature design: 1500-2000°C Continuous Operating Temp: 1500-2000°C (In inert atmosphere environment) Power supply: 220V-240/3KW, Single phase ,50/60HZ Heating element: High quality 1800C Mosi2 rod heating element 1. High quality vacuum formed insulation ensure fast heat up, excellent temperature control and short cool down times 2. Vertical layout, distribute in two sides evenly, give an improved temperature gradient 3. U shape non-metal high temperature heating element with high purity Mo and SI as main material. Fast rising speed and long service life. Easy for installing and replacement, max temperature can reach in the range described. Chamber material: High purity polycrystal alumina ceramic fiber material 1. Furnace chamber adopted high quality alumina polycrystalline fiber, which used Japanese technology (vac-sorb forming alumina polycrystalline fiber) with good insulation and durability properties, high tensile strength and no miscellaneous ball; So this furnace much more energy saving than the furnace use common fiber materials 2. High quality 1800 grade fiber alumina as refractory lining, pure white color Temp Controller Precision: ±1°C Thermocouple: B type platinum-platinum-rhodium thermocouple Temperature controller: Intelligent microcomputer PID controller can program 30 segments 1. Independent temperature control system, application within the constraints of the operating instructions 2. Furnace temperature controller adopts Intelligent PID technology for highly accurate 30 segments 3. Feature single setpoint digital control, simultaneous LED display of actual temperature VS set point 4. A high-precision digital microprocessor controller fitted with self-tuning and manual PID settings makes temperature and other parameters easy to control 5. Temperature controller Precision ±1°C Furnace Type: Non-split type Furnace Shell: 1. High quality cold-rolled steel sheets CNC processing 2. Environmental electrostatic plastic-spraying on surface after de-oiling, de-rusting, phosphating etc. nine processes. 3. Energy efficient insulation keeps the exterior safe to touch 4. The shell will not deform for long-term use, and it has better sealing performance than the square style Heating Rate: 1. Reach maximum temperature quickly, 5°C~10°C/min are setting freely 2. Suggest 5~8°C/min for longer life using of furnace Electronic component: High quality branded electric parts with high quality safety Control Mode: Power Regulator with Germany SCR unit control Transformer: High quality Spain transformer installed Supply Scope: 1. One set of furnace body with alumina reactor tube 2. One set Standard Stainless-Steel Sealing Flanges with mechanical gauge: (High Grade one with KF as optional and baffle valve as optional) 3. One set of float flowmeter for inert gas measurement control (Optional)	1	2590000/- As per PC-1

		4. Alumina tube block barrier (4pcs) 5. One pc of furnace hook 6. One pair of high temperature furnace gloves 7. An instruction book and operation manual 8. Four pcs alumina ceramic plugs 9. One pcs rubber plastic gas tube : 3 meters 10. One pc alumina ceramic boat (Optional) Safety protection: Overheat and thermocouple-break alarm Certification: ISO9001 CE SGS Warranty: 1-2 Years			
3	Weight Balance	Capacity: 0~1000 g Readability: 0.0001g Repeatability: +-0.0002g Overload Alarm: Yes LCD display: white back light with black font with standard size Scale Size: Φ80-100mm Glass based shield protection		1	70000/- As per PC-1
4	Distilled Water Plant	Water Output: ≥5 L/H Consumption: 5 KW Power Supply: A110/220V,50/60Hz		1	50000/- As per PC-1
5	Beakers	Capacity	Quantity	100	550000/- As per PC-1
		50 ml	20		
		100 ml	20		
		250 ml	20		
		500 ml	20		
		1000 ml	20		
		Note: Glass material should be of pure PYREX, UK base.			
6	Conical Flask	Capacity	Quantity	100	170000/- As per PC-1
		50 ml	20		
		100 ml	20		
		250 ml	20		
		500 ml	20		
		1000 ml	20		
		Note: Glass material should be of pure PYREX, UK base.			
7	Burettes	Capacity	Quantity	50	550000/- As per PC-1
		50 ml	25		
		100 ml	25		
		Note: Glass material should be of pure PYREX, UK base.			
8	Pipettes	Capacity	Quantity	50	90000/- As per PC-1
		1 ml	10		
		2 ml	10		
		5 ml	10		
		10 ml	10		
		25 ml	10		
		Note: Glass material should be of pure PYREX, UK base.			
9	Graduated	Capacity	Quantity	50	440000/-

	Cylinder	10 ml	10		As per PC-1
		25 ml	10		
		50 ml	10		
		100 ml	20		
		Note: Glass material should be of pure PYREX, UK base.			
10	Test Tubes	Capacity	Quantity	200	30000/- As per PC-1
		16*150 mm	100		
		13*100 mm	50		
		20*150 mm	50		
		Note: Also provide test tube rack.			
Note: Glass material should be of pure PYREX, UK base.					
11	China Dishes	Capacity	Quantity	100	50000/- As per PC-1
		70 cc	25		
		100 cc	25		
		125 cc	25		
		200 cc	25		
Note: Material should be of good porcelain quality.					
12	Water Bath	Capacity: 5-20L Temp. Range: RT. 5-100°C Temp. Fluctuation: ±0.5°C Temp. Accuracy: ≤±1°C Time Range: 0~999min Power: 500-1500W Voltage: AC110/220VV±10%, 50/60Hz Stainless Steel Chamber probably with cover, corrosion resistance, easy to clean, easy to use, drain valve make empty of bath water fast and easy for cleaning and moving, adjustable timer, PID automatic and uniform temp control with good precision		10	760000/- As per PC-1
13	Desiccator	Capacity	Quantity	10	830000/- As per PC-1
		150 mm	3		
		200 mm	3		
		250 mm	3		
		300 mm	1		
Note: Glass material should be of pure PYREX, UK base.					
14	Condensers	Type	Quantity	20	80000/- As per PC-1
		Coil	10		
		Liebig	10		
		Note: Glass material should be of pure PYREX, UK base.			

Section-IV: Bid Data Sheet

ITB Reference	Description	Detail
I.B.T Clause 2.3.1	Language of the Bid	English
I.B.T Clause 2.3.4	Bid Currency	Pak Rs. On free delivery to Consignee's end basis including all Ex-work, Transportation, Storage Charges till the destination.
I.B.T Clause 2.3.7	Bid Security	2 % of the total estimated price for whole procurement
I.B.T Clause 2.3.8	Bid Validity Period	100 Days
I.B.T Clause 2.2.2	Address for communications: BWP Road, Near Govt.College of Technology, Qasim Pur Colony, MNS UET Multan Phone: +92-061-933590-2 Email: treasurer@mnsuet.edu.pk	
I.B.T Clause 2.6.2	The Performance Guarantee: will be 10% of the total contract amount/value in shape of CDR/ Pay Order from any scheduled bank	

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

A. Introduction		
BDS Clause Number	ITB Number	Amendments of, and Supplements to, Clauses in the Instruction to Bidders
1.	2.1.1	Name of Procuring Agency: [Muhammad Nawaz Sharif university of Eng& Tehnology, Multan.]. The subject of procurement is: [Procurement of Chemical ENgineering Lab Equipments.(The supplier will be responsible to install/Commissioning the equipments within 07 days after supply of Equip)Period for delivery of goods: [25-days](Extension in delivery period will be given on justifiable reasons) Commencement date for delivery of Goods: [after issuing of Purchase/Supply Order]
2.	2.1.2	Financial year for the operations of the Procuring Agency: [2025-26] Name of Project/ Grant (ADP Scheme G.S.No.90): [Government of the Punjab] Name of financing institution: [Government of the Punjab] Name and identification number of the Contract: [Item wise rate contract on stamp paper @0.25% of the contract amount]
3.	2.1.3 (iv)	Maximum Number of members in Joint venture N/A
4.		Ineligible country(s) is or are [Government of Pakistan]
5.	2.3.6(iii)	Demonstration of authorization by manufacturer: [If Required]
B. Bidding Documents		
6.	2.2.2	The address for clarification of Bidding Documents is [EPADS]
7.	2.2.2	Pre bid meeting will be held [Not Applicable]
8.	2.3.9	Only one complete bid shall be submitted in original on EPADS portal. Copy of the bid is not required.
C. Bid Price, Currency, Language and Country of Origin		
9	2.3.1	[Language of the Bid is English]
10	2.3.4	The price quoted shall be <u>in Pak Rupees</u> . [price inclusive of incidental services and delivered duty paid (DDP)].
11.	2.3.4	[The price shall be fixed].
12.	2.1.4 (ii)	Country of origin [as per specification]
D. Preparation and Submission of Bids		
13.	2.1.3	Qualification Criteria. <u>[mentioned in compulsory parameters (: -</u>
14.	2.3.6&2.3.7	Spare parts required for ____ [number] of years of operation. [Not Applicable]
15.	2.2.2	Bid shall be submitted on: [EPADS Portal before closing time & date.]
16.	2.4.2	The deadline for Bid submission on EPADS is mentioned in Section I: Invitation to Bids.
17.	2.5.1	Time, date/ Month/ Year, and place for Bid opening. [EPADS Portal] [The date should be the same as for Bid submission specified under ITB 2.4.2, Sr No 16, above, and the time should be on the

		same day, at least 30 minutes after closing time of bid submission.]
18.	2.6.2	Amount of Performance Guarantee is: @1 0 % (Ten%) of the total contract value.
19.	2.3.8	Estimated Contract Price is @2% of estimated cost mentioned in the specification sheet against each lot.
20.	2.3.9	Bid validity period after opening of the Bid is of 100 Days .
21.	2.3.9	Only One Original Bid to be submitted online on EPADS Portal.
E. Opening and Evaluation of Bids		
22.	2.5.1	The Bid opening shall take place at: Conference Room, Adm in Block, MNS UEt Multan in presence of Tender Committee.. Street address: [BWP ROad,inside GCT Building/Plot No. [At Admin Block] Floor/Room No.: [Ground Floor/A block][Multan]. City/Town: Multan Country: [Pakistan]
23.	2.3.5	The currency that shall be used for Bid evaluation and comparison purposes to convert all Bid prices expressed in various currencies is: [Pak Rupees] The source of exchange rate shall be: [insert the source]
F. Bid Evaluation Criteria		
24.	2.5.8	Criteria to Bid evaluation. [As per rule-31 of PPR-14, a Procuring Agency is required to formulate evaluation criteria listing all the relevant information against which a Bid is to be evaluated.] [Bulk/Framework, item wise to be adopted (i.e. DDP, FOR). The Bidding procedure is single stage two envelop procedure .
		The evaluation shall be conducted on item-to-item basis. Each item shall be considered as one package and the bidder shall have to quote for its complete quantity.

Technical Evaluation Criteria

Category: (A). Evaluation Criteria .

Compulsory Parameter

1. Valid Tax registration with FBR. The bidder must attach National Tax Number (NTN) General Sales Tax (GST), PRA (where applicable), Professional Tax certificates.
2. The bidder will submit 2% Bid Security (**in original**) of total estimated cost for as mentioned in Tender Documents, in the form of Bank Call Deposit Receipt (CDR) from any scheduled bank. The Bid Security will be submitted before or at the time of e-Bid/tender opening.
3. Affidavit, duly attested by oath commissioner, signed and stamped by the contractor on E. Stamp paper of Rs.600/- minimum declaring that
 - The bidder is not currently blacklisted by the procuring agency/PPRA.
 - The documents/photocopies provided with Bid are authentic. In case of any fake/bogus document found at any stage, the Bidder shall be blacklisted as per Law/ Rules.
 - The provided information is correct.
4. The firm must have minimum three (03) years experience of relevant business(same nature of work). The company / contractor will provide at least 03 (three) Purchase orders / supply orders and relevant performance certificates must be attached.
5. **The Cumulative Annual Turnover for last three (03) years must be greater than or equal to 50 million.** The firm shall submit FBR's Tax Return for last three years in this regard.(2024-2025, 2023-2024 & 2022-2023 only & must)
6. The participating firm must be the manufacturer/Authorized Distributors/ Dealers/Supplier .
7. The participating firm must meet the specifications and requirement given in tender documents.
- 8 . COMPANY PROFILE AND STAFF DETAIL ON GIVEN SPECIMEN
- 9.. The firm must attach broucher of item for those quoted items.

Note: Failure to comply with any compulsory parameter will result in "non-responsiveness of the bidder". Bidders comply with compulsory parameters will be considered qualified.

G. Award of Contract

2.6.5	Percentage for quantity increase or decrease is: [but not more/ less than 20% of total awarded quantity].
2.6.2	The Performance Guarantee shall be: [10 percent of the Contract Price]
2.6.2	The Performance Security (or guarantee) shall be in the form of: call-deposit (CDR), Pay Order (PO)]

Section-V: General Conditions of Contract

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

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

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

3. Country 3.1. All Goods and Services supplied under the Contract shall have

of Origin [where applicable]	their origin in the countries and territories eligible under the rules, as 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 where the Services are supplied. Goods are produced when, through manufacturing, processing, or substantial and major assembly of components, a commercially recognized new product is obtained 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. In any case, the requirements of rules 10 & 26, PPR-14, shall be followed.
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 procuring agency.	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 executing 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 donors, if so required by the donors.
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 Guarantee

7.1. Within fifteen (15) days of receipt of the notification of Contract award, the successful Bidder shall furnish to the Procuring Agency the Performance Guarantee in the amount specified in SCC/Bid Data Sheet & clause 2.6.2 of ITB.

7.2. The proceeds of the Performance Guarantee 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. As per Rule-56 of PPR-14, the performance guarantee shall be denominated in the currency of the Contract acceptable to the Procuring Agency and shall be in one of the following forms:

- (a) a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the Procuring Agency's country, in the form provided in the Bidding documents or another form acceptable to the Procuring Agency; or
- (b) a Bank call-deposit (CDR), Demand Draft (DD), Pay Order (PO)

7.4. The performance guarantee 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 nominated for these purposes. **The Supplier will be responsible for installation of equipments and satisfactory inspection.**

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) (if so allowed by the Procuring Agency), 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. Upon delivery, the Procuring Agency shall give receiving certificate to the supplier with the statement that, "completion certificate along with satisfactory report shall be issued after due inspection as per clause-8 of GCC, which will enable the supplier to put up the bill".

10.3. For purposes of the Contract, DDP trade term used to describe the obligations of the parties shall have the meanings assigned to them by the current edition of Incoterms

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

11. Insurance

11.1. The Goods supplied under the Contract shall be delivered on DDP basis where the seller has the responsibility of insurance.

12. Transportation

12.1. The Supplier is required under the Contract to transport the Goods to a specified place of destination within the Procuring Agency's country, including (details to be decided by Procuring Agency as per

requirement) insurance and storage, as shall be specified in the Contract, and related costs shall be included in the Contract Price.

13. Incidental Services

[If required and decided by the Procuring Agency]

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) satisfactory performance for specified time/ quantity on-site and/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 shall be included in the Contract Price for the Goods and shall not exceed:

- (i) the prevailing rates charged for other parties by the Supplier for similar services; and
- (ii) original price of goods.

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 choose to purchase from the Supplier, provided that this choice shall not relieve the Supplier of any warranty obligations under the Contract; and
- (b) in the event of termination of production of the spare parts:
 - (i) advance notification to the Procuring Agency of the pending termination, in sufficient time to permit the Procuring Agency to procure needed requirements; and

- (ii) following such termination, furnishing at no cost to the Procuring Agency, the blueprints, drawings, and specifications of the spare parts, if requested.

15. Warranty

15.1. The Supplier warrants that the Goods supplied under the Contract are new, unused, of the most recent or current models selected by the Procuring Agency, 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 __01 year__ [to be decided by the Procuring Agency] year/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 _____ [to be decided by the Procuring Agency] year/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 rectify 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/relevant provision of PPR-14 including Blacklisting.

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. As per rule-62 of PPR-14, payments shall be made promptly by the Procuring Agency, but in no case later than thirty (30) days after submission of an invoice or claim by the Supplier, provided the work is satisfactory.

16.4. The currency of payment is [tPKR

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.

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, only if required for the successful completion of the job, 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. But, in no case, the overall impact of the change should exceed 15% of the contract cost and no provisions of PPR-14 should be violated.

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 the mutual consent through written amendment signed by the parties. No variation in finalized brands/ makes/models shall be allowed except in special conditions where the manufacturer has stopped producing or suspended that model or the latest model of similar series or version has been launched by the manufacturer or non-availability due to international mergers of the manufacturers or similar unavoidable constraints.

- 20. Assignment** 20.1. The Supplier shall not assign the whole of contract to anybody else. However, some parts of contract or its obligations may be assigned to sub-contractors with the prior written approval of the procuring agency.
- 21. Sub-contracts** 21.1. The Supplier shall notify the Procuring Agency in the Bid of all subcontracts to be assigned under this Contract. Such notification, in the original Bid or later, shall not relieve the Supplier from any liability or obligation under the Contract. SUB contract must comply with bid documents.
21.2. Subcontracts must comply with the provisions of GCC Clause 20.
- 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 imposition 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 along with other remedies available under PPR-14.
- 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;

- (b) if the Supplier fails to perform any other obligation(s) under the Contract; or
- (c) if the Supplier, in the judgment of the Procuring Agency has engaged in corrupt practices in competing for or in executing the Contract. For the purpose of this clause, corrupt practices will be defined as per Section-2 (d) of The PPRA Act, 2009.

“Corrupt practices” in respect of procurement process, shall be as given in S-2 (d) of PPRA, Act, 2009:

(d) “corrupt practice” means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official, bidder or Contractor in the procurement process or in Contract execution to the detriment of the procuring agency; or misrepresentation of facts in order to influence a procurement process or the execution of a Contract, collusive practices among bidders (prior to or after bid submission) designed to establish bid prices at artificial, noncompetitive levels and to deprive the procuring agency of the benefits of free and open competition and any request for, or solicitation of anything of value by any public official in the course of the exercise of his duty; it may include any of the following:

- vi. coercive practice by impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence the actions of a party to achieve a wrongful gain or to cause a wrongful loss to another party;
- vii. collusive practice by arrangement between two or more parties to the procurement process or Contract execution, designed to achieve with or without the knowledge of the procuring agency to establish prices at artificial, noncompetitive levels for any wrongful gain;
- viii. offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence the acts of another party for wrongful gain;
- ix. any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
- x. obstructive practice by harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process, or affect the execution of a Contract or deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements before investigators in order to materially impede an investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from

pursuing the investigation, or acts intended to materially impede the exercise of inspection and audit process

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 Guarantee, 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. Both, the Procuring Agency and the Supplier, may agree to exclude certain widespread conditions e.g: epidemics, pandemics, quarantine restrictions etc from the purview of "Force Majeure".

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. Any difference of opinion concerning "Force Majeure" may be decided through means given herein below.

26. Termination for Insolvency

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

27. Termination for Convenience

27.1. The Procuring Agency, by written notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Procuring Agency's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.

27.2. The Goods that are complete and ready for shipment (if

applicable) within thirty (30) days after the Supplier's receipt of notice of termination shall be accepted by the Procuring Agency on the Contract terms and prices. For the remaining Goods, the Procuring Agency may choose:

- (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. After signing the contract or issuance of purchase order, 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 and/or arbitration as per rule 68 of PPR-14 and in accordance with Arbitration Act-1940.

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 Punjab (Pakistan) unless otherwise specified in SCC.

31. Notices

31.1. Any notice given by one party to the other pursuant to this Contract shall be sent to the other party in writing or by any information technology mean for the time being in use and acceptable in ordinary course of business 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 & Services to the Procuring Agency. In case of imposition of new taxes/duties or concession thereof after the deadlines for the submission of bids the effect thereof shall be borne or availed by the procuring agency as the case may be.

Section-VI. Special Conditions of Contract

Special Conditions of Contract

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

1. Definitions (GCC Clause 1)

GCC 1.1 (g)—The Procuring Agency is: **MNS UET Multan**

GCC 1.1 (h)—The Procuring Agency's country is: **Pakistan**

GCC 1.1 (i)—The Supplier is:

Sample Provision

GCC 1.1 (j)—The Project Site is: **[Not applicable]**

2. Country of Origin (GCC Clause 3)

[All countries and territories as indicated in Section IV, BDS, of the Bidding documents, as ineligible may be mentioned here] India & Israel

3. Performance Guarantee (GCC Clause 7)

GCC 7.1—As per rule 56 of PPR-14, the amount of Performance Guarantee, as a percentage of the Contract Price, shall be: [(10) percent of the Contract Price]

GCC 7.4—the Performance Guarantee shall be retained for to cover the Supplier's warranty obligations or defect liability period in accordance with Clause GCC 15.2

Inspections and Tests (GCC Clause 8) []

4. GCC 8.6—Inspection and tests prior to shipment of Goods and at final acceptance are as follows:[The Inspection and test of equipments will be done by tender/Inspection committee at the time of delivery and on installation. The installation/commissioning with satisfactory performance of goods supplied, must be within 07 days after delivery.]

5. Packing (GCC Clause 9)

GCC 9.2—[This SCC shall supplement GCC Clause 9.2, exact details of the requisite packages be provided] All the equipments must be in proper packing.

6. Delivery and Documents [If required]

(GCC Clause 10) [format of contract is to be decided by the Procuring Agency, however, a model provision for DDP is as follows]

Sample provision (DDP terms) [Not applicable]

GCC 10.3—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:

- (i) copies of the Supplier's invoice showing Goods' description, quantity, unit price, and total amount;
- (ii) original and two copies of the usual transport document (for example, a negotiable bill of lading,

a non-negotiable sea waybill, an inland waterway document, an air waybill, a railway consignment note, a road consignment note, or a multimodal transport document) which the buyer may require to take the goods;

- (iii) copies of the packing list identifying contents of each package;
- (iv) insurance certificate ;
- (v) Manufacturer's or Supplier's warranty certificate;
- (vi) Where applicable (Pre shipment/ port/ Procuring Agency Delivery site, inspection certificate), issued by the Procuring Agency nominated inspection agency, and the Supplier's factory inspection report (Inspection type depends on the nature of procurement and volume of procurement); and
- (vii) Certificate of origin.

[Other similar documents should be listed, depending upon the Incoterm provisions.]

7. Insurance

(GCC Clause 11) [where applicable]

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

8. Incidental Services (GCC Clause 13)

GCC 13.1—Incidental services to be provided are: The price of all types of incidental services quoted in the Bid price or agreed with the selected Supplier shall be included in the Contract.

9. Spare Parts [Not applicable]

(GCC Clause 14) [where applicable]

GCC 14.1—Additional spare parts requirements are:

Sample provision

GCC 14.1—Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares for the Goods. Other spare parts and components shall be supplied as promptly as possible, but in any case within six (6) months of placing the order and opening the letter of credit.

10. Warranty

(GCC Clause 15) one year warranty in all aspects.

11. Sample provision

[Not Required].

12. 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:

Payment for Goods supplied: [to be decided by the Procuring Agency as per rule-62 of PPR-14]

Payment may be made in Pak. Rupees in the following manner: (to be decided by the Procuring Agency)

- (i) L.C Modality.
- (ii) Running Bill modality.
- (iii) Lump sum modality.

13. Prices (GCC Clause 17)

Sample provision

GCC 17.1—Prices shall be fixed and shall not be adjusted.

14. Liquidated Damages (GCC Clause 23)

GCC 23.1—Applicable rate:

Maximum deduction:

[Applicable rate shall not exceed one-half (0.5) percent per week, and the maximum shall not exceed ten (10) percent of the Contract Price after that Procuring Agency may proceed for the termination of contract along-with other remedies available under PPR-14.]

15. 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:

As per rule-68 of PPR-14, in the case of a dispute between the Procuring Agency and the Supplier, the dispute shall be referred for arbitration in accordance with the Arbitration Act 1940.

16. Governing Language (GCC Clause 29)

GCC 29.1—The Governing Language shall be: English

17. Applicable Law (GCC Clause 30)

GCC 30.1-The Contract shall be interpreted in accordance with the laws applicable in the jurisdiction of the province of Punjab (Pakistan):

18. Notices (GCC Clause 31)

GCC 31.1—Procuring Agency's address for notice purposes: MNS UET Multan

—Supplier's address for notice purposes:

19. Product Specifications.

(Detailed technical specifications, given in Award of Contract, will be followed)

Section-VII. Schedule of Requirements

The supplies shall be delivered in accordance with the Purchase Orders issued.

Respective Consignee's End: End User

. Free delivery to Consignee's end (DDP) basis:

MODE OF PENALTY	DELIVERY OF 100% QUANTITY AS PER PURCHASE ORDER
Without Recovery of Late Delivery Charges	525-days of delivery (As per Data Sheet provision)
With Recovery of Late Delivery Charges	In case the supplier firm fails to adhere the delivery schedule then, its status will be considered blacklisted until and unless, the firm provides genuine reasons for delay in the supplies and it will be the discretion of the Executive Director, Procuring Agency to accept the supplies. However, this acceptance will be subject to the imposition of the Late Delivery Charges at the uniform rate of 2% per day for every day lapse upto 07 days. After that the blacklisting mechanism may be taken.
Risk Purchase	After expiry of prescribed delivery period the Procuring Agency may proceed for risk purchases (at the risk & cost of defaulter) to ensure the un-interrupted healthcare services to the patients.

Section-VIII: Sample Forms
8.1 Bid Form

[To be signed & stamped by the bidder and reproduced on the letter head. To be attached with the Bid, in case of Single Stage One Envelope Procedure and with the Financial Bid, in case of Single Stage Two Envelope Procedure]

Date: _____

To: Treasurer/Addl. Treasurer

]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, 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, specified in the Schedule of Requirements.

If our Bid is accepted, we will obtain the guarantee in a sum equivalent to 10 percent of the Contract Price for the due performance of the Contract, in the form prescribed by the Procuring Agency.

We agree to a Bid by this Bid for a period of [120] days from the date fixed to Bid opening under Clause 2.3.8 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 (if required), 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 goods provider	Amount and Currency
------------------------------------	---------------------

_____	_____
-------	-------

_____	_____
-------	-------

_____	_____
-------	-------

(if none, state "none")

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

Dated this _____ day of _____ 20_____.

[signature]

[in the capacity of]

Duly authorized to sign Bid for and on behalf of _____

8.2 Bidder's JV Members Information Form (NOT APPLICABLE)

8.3. Manufacturer's Authorization Form

[To be signed and stamped by the Bidder and to be attached with Technical Bid]

[See Clause 2.3.6 (iii) 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 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 to 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.

8.4. Bidder Profile Form

[To be signed & stamped by the Bidder and reproduced on the letter head. To be attached with Technical Bid]

Sr.#	Particulars
1.	Name of the company:
2.	Registered Office:
Address:	
Office Telephone Number:	
Fax Number:	
3.	Contact Person:
Name:	
Personal Telephone Number:	
Email Address:	
4.	Local office if any:
Address:	
Office Telephone Number:	
Fax Number:	
5.	Registration Details:

a) Audited Financial Statement Attachment/Income Tax Returns (Last ____ years)

Yes	No
-----	----

b) Details of Experience (Last ____ Years)

(i)	Similar Project (Agency/Department)	Item Name
(ii)	Value of total Projects/Tenders/POs	Amount

c) Staff Detail and last month Payroll (May use extra sheet by providing all the details of staff)

Yes	No
-----	----

[The Procuring Agency should formulate Bidder Profile Form in accordance with PPR-14 keeping in view its requirements, nature of procurement i.e. Bulk/Framework, item wise/package wise and form of contract to be adopted (i.e. DDP, CIF, C&F, FOR, FOP etc. if applicable). However, for a standard procurement/contract, contents of a generalized Bidder Profile Form may be as provided above.]

8.5. General Information Form

[To be signed & stamped by the Bidder and reproduced on the letter head. To be attached with Technical Bid]

	Particulars				
Company Name					
Abbreviated Name					
National Tax No.			Sales Tax Registration No		
PRA Tax No.					
No. of Employees			Company's Date of Formation		

*Please attach copies of NTN, GST Registration & Professional Tax Certificate

Registered Office Address		State/Province	
City/Town		Postal Code	
Phone		Fax	
Email Address		Website Address	

8.6. Affidavit

[To be printed on PKR 600 Stamp Paper, duly attested by oath commissioner. To be attached with Technical Bid]

Name: _____

(Applicant)

I, the undersigned, do hereby certify that all the statements made in the Bidding document and in the supporting documents are true, correct and valid to the best of my knowledge and belief and may be verified by employer if the Employer, at any time, deems it necessary.

The undersigned hereby authorize and request the bank, person, company or corporation to furnish any additional information requested by the [name of Procuring Agency] of the Punjab deemed necessary to verify this statement regarding my (our) competence and general reputation.

The undersigned understands and agrees that further qualifying information may be requested and agrees to furnish any such information at the request of the [name of Procuring Agency]. The undersigned further affirms on behalf of the firm that:

- (i) The firm is not currently blacklisted by the Procuring Agency.
- (ii) The documents/photocopies provided with Bid are authentic. In case, any fake/bogus document was found at any stage, the firm shall be blacklisted as per Law/ Rules.
- (iii) Affidavit for correctness of information.

[Name of the Contractor/ Bidder/ Supplier] undertakes to treat all information provided as confidential.

Signed by an authorized Officer of the company

Title of Officer: _____

Name of Company: _____

Date: _____

8.7. Performance Guarantee Form

[To be signed & stamped by the Bidder and reproduced on the letter head. To be attached with Technical Bid]

To,
[name and address of the Procuring Agency]

WHEREAS (Name of the Contractor/ Supplier) _____
hereinafter called "the Contractor" has undertaken, in pursuance of "INVITATION TO BID FOR THE
"PROVISION OF _____" procurement of the following:

1. [Please insert details].

(Here in after called "the Contract").

AND WHEREAS it has been stipulated by you in the Contract that the Contractor shall furnish you with a
performance guarantee as specified by a scheduled bank (CDR/PO) for the sum specified therein as security for
compliance with the Contractor's performance obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor a Guarantee;

THEREFORE WE hereby affirm that we are Guarantor and responsible to you, on behalf of the Contractor, 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 Contractor to be in default under the
Contract, and without cavil or argument, any sum or sums as specified by you, 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 _____ day of _____, 20____, or _____ [insert number of days]
after the rectification of the Defects, whichever is later.

[NAME OF GUARANTOR]

Signature _____

Name _____

Title _____

Address _____

Seal _____

Date _____

8.8. Technical Bid Form

[To be signed & stamped by the Bidder and reproduced on the letter head. To be attached with Technical Bid

Only for Equipments technical Specification)

Sr. No.	Item name	Brand name with Country of Manufacturer	Make & model	Quantity	Country of Origin	Specifications dimensions

Stamp & Signature of Bidder _____

8.9. Contract Form

[To be signed & stamped by the Bidder and reproduced on the letter head. To be attached with Technical Bid
]

THIS AGREEMENT made on the _____ day of _____ 20____ between [name of Procuring Agency] of [country of Procuring Agency] (hereinafter called “the Procuring Agency”) on the one part and [name of Supplier] of [city and country of Supplier] (hereinafter called “the Supplier”) on 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 and the Price Schedule submitted by the Bidder;
 - (b) the Schedule of Requirements;
 - (c) the Technical Specifications;
 - (d) the General Conditions of Contract;
 - (e) the Special Conditions of Contract; and
 - (f) the Procuring Agency’s Notification of Award.
 - (g) Contract agreement
 - (h) Complete Bidding document
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 rectify defects therein in conformity with all respects in accordance 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 rectification 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 mentioned above.

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

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

8.10. Financial Bid Form/Price Schedule

[To be signed & stamped by the Bidder and reproduced on the letter head. To be attached with Financial Bid]

Sr. No.	Item name	Specifications/ dimensions	Country of Origin	Brand name, make & model	Unit price (inclusive of all taxes & duties etc.)	Quantity	Total price (inclusive of all taxes & duties etc.)	Total price (in words)
Total price in figures								
Total price in words								

Total Bid value (against which a Bid shall be evaluated) in figure.

Total Bid value (against which a Bid shall be evaluated) in words.

Note:

In case of difference between unit price and total price, unit price shall prevail and total price shall be "final". (Please refer ITB clause 2.5.6).

In case of difference between amount in "words" and amount in "figures", amount in "words" shall be considered final.

Stamp & Signature of Bidder _____

8.11. Bid Security Form

[To be signed & stamped by the Bidder and reproduced on the letter head. To be attached with Financial Bid
]

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 Guarantee, 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 thirty (30) 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]

Section IX- Check List

[To be signed and stamped and presented on Bidder's letter head pad]

The provision of this checklist is essential prerequisite along with submission of tenders (with technical proposal).

Sr. #	Detail	Attached on Page Nos.	Not Attached
1	Valid Tax registration with FBR. The bidder must attach National Tax Number (NTN), professional tax and General Sales Tax (GST) certificates and also the active registration		
2	The bidder will submit 2 % Bid Security (in original) of estimated cost as mentioned in Tender Documents, in the form of Bank Draft/ Call Deposit Receipt (CDR) from any scheduled bank. The Bid Security (if applicable) will be submitted before or at the time of e-Bid/tender opening.		
3	Affidavit, duly attested by oath commissioner, signed and stamped by the contractor on E. Stamp paper of Rs.600/- minimum declaring that - The bidder is not currently blacklisted by the procuring agency/PPRA. - The documents/photocopies provided with Bid are authentic. In case of any fake/bogus document found at any stage, the Bidder shall be blacklisted as per Law/ Rules. - The provided information is correct.		
4	The firm must have minimum three (03) years experience of relevant business. The company / contractor will provide at least 03 Purchase orders / supply orders and relevant performance certificates must be attached.		
5	Company profile. Staff list along with location and address.		
6	The Cumulative Annual Turnover for last three (03) years must be greater than the estimated value of the item(s) quoted. The firm shall submit FBR's Tax Return for last three years in this regard.		

Stamp & Signature of Bidder _____

Note: Check list continues to next page

Sr. No	Item Name	Attached on Page #	Not Attached
7	Technical proposal/specifications/all required annexure filled along with tender documents duly signed & stamped by the firm.		
8	Acceptance of terms & conditions/ tender documents duly signed and stamped by the firm.		
9	Bid form signed & stamped by the firm.		
10	Manufacturer/principal/ authorized/sole agent/authorized dealers Certificate		
11	Manufacturing license in case of manufacturer.		
12	Price reasonability certificate on firm's letter pad.		
13	Any other documents in favor of bid.		

Stamp & Signature of Bidder _____