

# TENDER DOCUMENTS Civil Lab Equipment NUTECH / SCM / Civil Lab Eqpt (PSDP) 2020 / TD-108

**NATIONAL UNIVERSITY OF TECHNOLOGY** 

#### TENDER NOTICE

## National University of Technology (NUTECH) NUTECH / SCM / Civil Lab Eqpt (PSDP) 2020 / TD-108

Sealed bids are invited from Government / FBR Registered Firms for the procurement of Civil Lab Equipment for NUTECH on **FOR Basis**.

- 1. Tender documents containing terms, conditions and detailed specifications of items (including draft contract) can be downloaded from NUTECH website "https://nutech.edu.pk" w.e.f 22 Jan 2020.
- 2. Quotations shall be submitted as per requirement of the tender documents.
- 3. Bidders will be required to submit **Bank Draft / CDR** equal to **5%** of quoted value as Bid Bond in favor of National University of Technology (NUTECH).
- 4. Sealed bids with detailed specifications should reach on the following address latest by **1130 hours on 10 Feb 2020.** Late submission will not be entertained.
- 5. Bids will be opened at **1200 hours** on **10 Feb 2020 at SCM Office**.
- 6. Project is to be completed in **120 days** from the date of award of contract.
- 7. <u>Submit Rs 1500/- as Tender fee in favor of NUTECH HBL Account (**NUTECH Tendering and Contracts, 5037-7000210755).** Please attach bank receipt with technical offer. Offers will not be entertained without payment of processing fee.</u>

<u>Deputy Director (Supply Chain Management)</u>

NATIONAL UNIVERSITY OF TECHNOLOGY, UPROAD, I-12, ISLAMABAD

Tel: 0092-51-5476768, Ext: 227

## NATIONAL UNIVERSITY OF TECHNOLOGY SUPPLY CHAIN MANAGEMENT INVITATION TO TENDER

Tender submission time: 1130 hours, 10 Feb 2020

- 1. NUTECH desires to procure the list of item(s) / Store(s) on <u>FOR</u> <u>basis</u>. as per <u>Annexure-A</u>. Interested bidders are requested to send their bids through courier or deliver at NUTECH under "<u>Single Stage Two Envelopes"</u> (two <u>envelopes placed together in third envelope</u>), <u>marked clearly as "Technical Offer"</u> and <u>"Commercial Offer"</u> respectively to the undersigned, latest by or before above mentioned due date.
- 2. <u>Conditions Governing Contracts.</u> The contract made as result of this IT will be in accordance with the draft contract published on NUTECH University website and other special conditions (Mentioned in this document) that may be added to given contract.
- 3. **Delivery of Tender.** The offer is to be submitted as under:
  - a. <u>Technical Offer.</u> Technical Offer should contain only Annexure-A, Annexure-A-1 & Annexure B duly filled in (supported with relevant technical literature / details / catalogues etc) and receipt of tender processing fee. Copy of bid bond WITHOUT MENTIONING PRICE should be attached with technical offer. Only relevant technical details ie literature/brochures) without mentioning the financial aspect of the offer in DUPLICATE should be enclosed in an envelope. In technical proposal, all items must have the brand names, model number, manufacturer's name, country of origin, manufacturer's warranty including parts with complete specs and brochures. Re-conditioned and re-furbished equipment shall not be acceptable. Following information will be clearly marked on the envelope:
    - (1) Technical Offer
    - (2) Original Performa Invoice (without price)
    - (3) Tender number

- (4) Date/ time of opening
- b. <u>Commercial Offer.</u> Commercial Offer will contain Annexure-C and bid bond (Dully mentioned and placed in separate envelope. The offer indicating the quoted price FE/Local Currency (in Local Currency for FOR cases & in FE for FOB cases) in figures as well as in words would be enclosed in an envelope. Following information will be clearly marked on the envelope;
  - (1) Commercial Offer
  - (2) Original Performa invoice with price
  - (3) Tender number
- c. Both the envelopes i.e. commercial offer and technical offer would be enclosed in yet another properly sealed envelope that will be marked with address of this office only. There should be clear indication that this envelope contains tender documents.
- d. The tender duly sealed will be addressed to the following:-

Deputy Director (Supply Chain Management Office)

NATIONAL UNIVERSITY OF TECHNOLOGY (NUTECH)

IJ P ROAD, I-12 ISLAMABAD

Tel: 0092-51-5476768, Ext: 227

- 4. <u>Date and Time for Receipt of Tender.</u> Sealed bids with detailed specifications should reach SCM office latest by **1130 hours on 10 Feb 2020.** Delay occurring in post shall not be accepted. Tenders received after the appointed / fixed time will NOT be entertained. The appointed time will, however, fall on next working day in case of closed / forced holiday.
- 5. <u>Tender opening.</u> The offers shall be opened 30 minutes after submission time. Commercial offers will be opened at later stage if Technical Offer is found acceptable on examination by technical authorities. Date and time for opening of

commercial offer shall intimated later. Only legitimate / registered representatives of firm will be allowed to attend tender opening.

- 6. <u>Validity of Offer.</u> The validity period of quotations must be indicated and should be 90 days from the date of opening of financial offer.
- 7. **Documents.** Following information / copy of documents must be provided / attached with offer:
  - a. A copy of letter showing firm's financial capability.
  - b. NTN/GST number be mentioned on the offer and copy of registration Certificate issued by Sales Tax Department, attached.
  - c. Foreign supplier to provide its Registration Number issued by respective Department of Commerce authorizing export of subject stores (in FOB cases).
  - d. Annexes A, A-1, B and C and special conditions must be signed and stamped. ATTACH ONLY RELEVANT DOCUMENTS.
  - e. Complete all Annexes as per given format. Do not use your format or letter head. Offer may be rejected if given format is not followed.
  - f. OEM/principal agency agreement must be provided.
- 8. **<u>Disqualification.</u>** Offers are liable to be rejected if:
  - a. Validity of offer is not quoted as required in IT documents.
  - b. Any deviation from the General/ Special / Technical Instructions.
  - c. Offers are found conditional or incomplete in any respect.
  - d. Copy of EM/Bid Bond & Tender processing fee (with tech offer) and original EM/Bid Bond (with fin offer) are NOT attached.
  - e. Multiple rates are quoted against one item.
  - f. Manufacturer's relevant brochures and technical details on major equipment assemblies are not attached in support of specifications.
  - g. Offer received later than appointed / fixed date and time.
  - h. Subject to restriction of export license.

- Offers (Commercial / technical) containing non-initialled / unauthenticated amendments / corrections / overwriting. If the validity of the agency agreement has expired. The commercial offer against FOB / CIF / C&F tender quoted in local currency.
- j. If the offer is found to be based on cartel action in connivance with other sources/participants of the tender.
- 9. **Earnest Money / Bid Bond.** Commercial Offer must be accompanied with a Bid Bond (CDR/Pay Order/Bank Draft) in agreement of faithful compliance of the conditions of Contract. This amount will be equivalent to 5% of the total quoted value. The Bid Bond amount submitted by the successful bidder will however be refunded on effective termination of Contract. (The Bid Bond will be forfeited in case of default by the bidder from his commitments made through his offer). Submission of Bid Bond is mandatory; otherwise your offer will be rejected. Bid Bond will be used as performance guarantee till the delivery of stores, otherwise separate performance guarantee valued at 5 % of contract will be submitted by successful firm till stores are delivered and inspected.

#### 10. Return of Earnest Money/Bid Bond.

- a. Bid Bond to the unsuccessful bidders will be returned on finalization of the lowest evaluated bidder.
- b. Bid Bond of the successful bidder/bidders will be returned on submission of Bank Guarantee/Bid bond against warranty period OR Bid bond retained for the warranty period as the case may be.

#### 11. Terms of Payment/ LC Charges

- a. In FOB cases (all categories) payment will be made through letter of credit (LC). LC opening charges in Pakistan are to be borne by NUTECH. Payment will be made through irrevocable LC in favour of Manufacturer.
- b. In FOR cases 50% advance payment will be made to the Seller on provision of unconditional Bank Guarantee/ CDR/ DD/ Pay order. 50% payment will made to the Seller after receipt and confirming the correctness of ordered specifications, installation, commissioning OR as the case may be.

- 12. <u>Bank Guarantee (BG)</u>. In case where equipment is backed by warranty, the BG submitted equal to 05% of FOB/FOR/CPT etc value shall remain valid for up to 60 days beyond completion of warranty period.
- 13. <u>Taxes/ Duties/ Custom clearance</u> All taxes /duties /import Licenses Fee as applicable under government laws in Pakistan as well as country of supplier shall be on firm (in FOR Case). NUTECH will provide applicable exemption certificates and documents (In FOB Cases only).
- 14. <u>Insurance:</u> Insurance will be NUTECH's responsibility through NICL (in FOB Cases).
- 15. <u>Freight charges /Misc charges:</u> All charges such as packing, forwarding, local freight, loading and unloading, installation and commissioning, custom clearance, orientations, on job training or any other will be part of quoted price. Delivery till NUTECH will be firm's responsibility and all associated costs will be part of quotation as well.
- 16. <u>Warranty</u>. All goods /store offered would be brand new, from current year of production and will be governed as per warranty clause. The warranty period may be covered by BG as depending on the value /criticality of the tender equipment.
- 17. <u>Delivery Schedule.</u> Store will be delivered within 120 days from contract signing date.
- 18. **Force Majeure.** If non-compliance with the period of delivery or services can be proved to be due to Force Majeure, such as but not limited to mobilization, war, riot, strike, lockout or the occurrence of unforeseen events, the period shall be reasonably extended.
- 19. **Subletting** Suppliers are not allowed to sublet wholly or part of the contract to any other firm /company without prior permission by NUTECH. Firm found in breach of the clause will be dealt with as per purchaser's right and discretion.
- 20. <u>Arbitration.</u> The dispute shall referred for adjudication to a board comprising of Pro-Rector NUTECH as Chairman and two arbitrators, one to be nominated by each party. The arbitration proceeding shall be held in Pakistan under Pakistan Law. The venue of arbitration shall be the place from which the contract is issued or such other place as the purchaser at his discretion may determine. Arbitration award so given will be firm and final.

- 21. **Redress Of Grievance.** In case of dispute, case shall be reviewed by 'NUTECH Redress of grievance committee and decision of NUTECH shall be final and binding on both parties.
- 22. Export License/Permit /End User Cert. It shall be the responsibility of the Supplier to obtain from the Government concerned all permits and export licenses, etc required to enable each consignment to be shipped immediately as per the delivery schedule. In case the supplier fails to arrange export license within 30 days of signing the contract the purchaser reserves the right to cancel the contract on the risk and expense of the supplier without prior notice. The purchaser will provide End User Certificate for acquisition of export license to the supplier (format to be provided by the supplier for respective country within 10 day of signing of the contract).
- 23. <u>Technical Specification:</u> The supplier will provide OEM certificate, quality certificate /inspection document to the purchaser confirming the quality of the product being supplied under this contract .Store must bear the manufacturer's identification marking /monogram.
- 24. <u>Inspection /Testing of Store</u>: Inspection testing will be carried out at NUTECH by the concerned inspection team as detailed by the respective department in accordance with the laid down Acceptance Criteria. (Acceptance Test Procedure (ATPs)/Drawing /Test standard and specification). The supplier will provide ATPs with technical offer. Mutually agreed/approved ATPs will form part of contract to govern the inspection of store subsequently.
- 25. **Requirement of Samples.** The requirement of tender sample will be included in the case if required for evaluation by technical authorities'. Beside this advance sample if required will be also made part of the IT as well as the contract.
- 26. <u>Change In Specification / Mfr / Model.</u> No alternation marked/brand and quality of store will be entertained after the tender have been opened.
- 27. Checking of Store at Consignee End. All stores will be checked at Consignee's end in the presence of the supplier's representative. If for some reason, the supplier decides not to nominate his representative for such checking, an advance written notice to this effect will be given by the supplier to the consignee prior to immediately on shipment of store. In such an event the supplier will clearly undertake that decision of consignee with regard to quantities and description of

consignment will be taken as final and discrepancy found will be accordingly made up by supplier. In all other cases the consignee will inform the supplier about arrival of consignment immediately on receipt of store through registered email/letter and telephone. If no response from the supplier is received within 15 days from initiation letter the consignee will have the right to proceed with the checking without supplier's representative .Consignee's report on checking of the stores will be binding on the supplier in such cases.

- 28. Packing /Marking. The supplier shall be responsible for proper packing of the Store in standard export packing worthy of transportation by sea /air /road rail so as to ensure their content being free from lose or damages due to faulty packing on arrival at the ultimate destination. Packing of stores will be done at the expenses of the supplier. All packing cases, containers and other packing material shall become the property of the NUTECH on receipt. Any loss occurred /demurrage paid due to wrong marking will be made good by the supplier
- 29. **Original Performa Invoice**: Original Performa invoice must have following components incorporated:
  - a. HS Code
  - b. Incoterm
  - c. Payment Terms
  - d. Origin of good
  - e. Port of shipment
  - f. Address of OEM
  - g. Seller acceptance (on Performa Invoice)
  - h. Invoice Date
  - i. Latest date of shipment
  - j. Seller complete bank detail

**Note:** Performa Invoice in the name of NUTECH in case of FOB cases & in the name of local partner in case of FOR cases.

- 30. **General Instructions:** Following must be noted:-
  - The firm should provide point to point acceptance of each clause of IT and special instructions attached with IT.
  - b. Firm will render a certificate with technical offer that firm is neither defaulter nor blacklisted by any Government / semi Government

- organization directly or indirectly.
- c. Rates should be quoted on Free Delivery basis at NUTECH Islamabad.
- d. 2 years warranty against 5% Bank Guarantee of the store value will be required from the successful bidders from the date of commissioning as performance bond.
- e. The stipulated delivery period should be strictly adhered to. Any anticipated delay that is beyond the control of Seller will be informed (in writing) well in advance of the expiry of the due date of the activity along with reasons thereof, requesting for the grant of extension in delivery period. If the Seller fails to do so, or the Buyer is not convinced with the rationale provided by the Seller, Liquidated Damages up to/at 2% per month or part thereof, will be imposed. However, the maximum limit of the Liquidated Damages will not exceed 10% of the delayed store value.
- f. If even after applicability of 10% LD, the Seller fails to deliver the required stores, the Buyer will be at liberty to Cancel the contract, and /or procure the stores from an alternate source, on the Seller's "Risk & Cost/Expense". In that case, the Seller will be bound to make payment to the new source through NUTECH. The purchaser's decision under this clause shall NOT be subjected to arbitration.
- g. NUTECH reserves the right to cancel the Contract without assigning any reason whatsoever during its currency / execution / after placement, if the firm is found to be involved in any dubious activity, litigation, lacking to meet contractual obligations with the purchaser or is blacklisted with any other Public procurement agency. No claims / loss /damage of whatsoever nature shall be entertained and NUTECH's decision in this regard will be final / binding on the Seller.
- h. An appropriate amount may be paid for mobilization against Bank Guarantee/CDR/Demand Draft/Pay Order.
- Firms with previous pending/outstanding projects/business with NUTECH may not be considered for award of this tender.

#### Annex-A

#### **Technical Specifications**

#### NUTECH / SCM / Civil Lab Eqpt (PSDP) 2020 / TD-108

Ser	Items	Description	Country of Origin	A/U	Qty Req		der liance	Tech Scrutiny to be done by user	
						Yes	No	Accepted	Rejected
								Reason of	Rejection
1.	Hydraulic Bench with DAQ System (Compatible with Flow channel, Flow over weir, orifice discharge)	<ul> <li>Mobile, floor-standing service unit for fluid mechanics apparatus</li> <li>Base constructed from robust, corrosion-resistant / stainless steel material</li> <li>Sump tank capacity 130 L (minimum).</li> <li>Volumetric flow measurement via remote sight gauge</li> <li>Stepped tank for low and high flow rates, with capacities 0-55 L</li> <li>Open channel in bench</li> <li>top with quick-release outlet fitting</li> <li>Rapid and easy interchange of the different modules.</li> <li>Required Services, Assembly and Installation, Interface and Control Software, Starting-up, Safety, Maintenance, Calibration &amp; Practices Manuals.</li> <li>User Guide</li> <li>220V/50Hz/1 ph Equipment must be compatible with already held accessories and their relevant software</li> </ul>	Europe/ USA	No	2				

1a.	Flow over weir apparatus with DAQ (Compatible with Hydraulic bench)	<ul> <li>Weir plates to fit in channel of Hydraulics Bench (Minimum 4 of different shapes)</li> <li>Identical weir height for all weirs</li> <li>Holder for measuring weir to be studied</li> <li>Holder and rectangular weir both with lateral sealing lips</li> <li>Weir plates made of stainless steel</li> <li>Required Services, Assembly and Installation, Interface and Control Software, Starting-up, Safety, Maintenance, Calibration &amp; Practices Manuals.</li> <li>User Guide</li> <li>220V/50Hz/1 ph</li> </ul>	Europe/ USA	No	2		
2.	Hydrological investigations system with DAQ	<ul> <li>Computer controlled hydrology system with DAQ</li> <li>A unit designed to obtain catchment rainfall and runoff values as functions of time</li> <li>Wheeled Unit for easy mobility</li> <li>Overhead square pattern spray nozzles supplying water via a flow control valve, flow meter and solenoid valve.</li> <li>Close water circuit</li> <li>Provide display of the hydrograph</li> <li>Dimensions: 2 m long, 1 m wide and 0.20 m deep (minimum).</li> <li>Lifting system to regulate the tilt.</li> <li>Storage tanks of minimum 180 L with filter and drainage valve</li> <li>Sediment measurement system</li> <li>Hermetic trap doors and meshed trap doors</li> </ul>	Europe/ USA	No	1		

		<ul> <li>Adjustable (Height and width) Spray nozzles with ball valves for simulating variety of rainfall patterns at least 8 for even distribution across the tanks</li> <li>Shower nozzles adjustable in height and length with multiple flows to simulate storms and local inputs.</li> <li>Required Services, Assembly and Installation, Interface and Control Software, Starting-up, Safety, Maintenance, Calibration &amp; Practices Manuals.</li> <li>220V/50Hz/1 ph         <ul> <li>Experimental Capabilities</li> </ul> </li> <li>Effect of rainfall of varying duration on the discharge.</li> <li>Effects of wells on the groundwater level over time</li> <li>Determination of the compactness index.</li> <li>Determination of the water obtained thanks to the gravity force and the field capacity.</li> <li>Study of groundwater catchment.</li> <li>Study of the interaction of cones of</li> </ul>					
		<ul> <li>Study of the interaction of cones of depression by two adjoining wells.</li> </ul>					
3.	Portable BOD and COD measuring device	<ul> <li>Digital BOD and COD measuring device with complete accessories</li> <li>To measure biochemical oxygen demand and chemical oxygen demand in wastewater</li> <li>With excellent range, accuracy and</li> </ul>	Europe/ USA	No	4		

	resolution  User guide  Required Services, Assembly and Installation, Interface and Control Software, Starting-up, Safety, Maintenance, Calibration & Practices Manuals  220V/50Hz/1 ph Experimental Capabilities  To measure the Biochemical oxygen demand (BOD) of the sample.  To measure the Chemical oxygen demand (COD) of the sample.	
Suspended solid particle 4. measurement equipment (TDS meter)	<ul> <li>Digital TDS meter with complete accessories</li> <li>Highly precise and accuracy</li> <li>Lab accuracy &amp; comfort in portable field instrument</li> <li>For measuring turbidity, Total Dissolved Solids (TDS) conductivity, salinity, resistivity, density etc</li> <li>User guide</li> <li>Required Services, Assembly and Installation, Interface and Control Software, Starting-up, Safety, Maintenance, Calibration &amp; Practices Manuals</li> <li>220V/50Hz/1 ph Experimental Capabilities</li> <li>To measure the Potassium, magnesium and calcium contents in sample.</li> <li>To measure combined total amount of both inorganic and organic substances dissolved in water.</li> </ul>	No 4

5.	Turbidity meter	<ul> <li>Digital Multipara meter sampling instrument with complete accessories and consumables</li> <li>As per ISO "Water Quality: Determination of Turbidity"</li> <li>User guide</li> <li>Required Services, Assembly and Installation, Interface and Control Software, Starting-up, Safety, Maintenance, Calibration &amp; Practices Manuals</li> <li>220V/50Hz/1 ph         Experimental Capabilities     </li> <li>To tests the turbidity of water</li> <li>To measure Total Suspended Solids (TSS) in water</li> </ul>	Europe/US A	No	4		
6.	Partition Gravimetric equipment	<ul> <li>Wall mounted oil water filter with data logger and complete accessories</li> <li>Control panel, valves, process pump, cartridge filters</li> <li>Pipes and fittings</li> <li>Oil removal mechanism (minimum capacity ≥ 2 gpm)</li> <li>User guide</li> <li>Required Services, Assembly and Installation, Interface and Control Software, Starting-up, Safety, Maintenance, Calibration &amp; Practices Manuals</li> <li>220V/50Hz/1 ph         Experimental Capabilities     </li> <li>To separate gross amounts of oil and suspended solids from the wastewater</li> </ul>	Europe/US A	No	1		

7. Constant head permeameter Cell (Compatible with SL10 & SL 12 Impact test UK already held at Lab)	7.	Constant head permeameter Cell (Compatible with SL10 & SL 12 Impact test UK already held at Lab)  permeam porous be	ht head (or combination) bility cell with core cutter, base, tie rods and top plate. g rod 8 mm dia. x 300 mm atible to permeability cell) d Services, Assembly and cion, Interface and Control e, Starting-up, Safety, hance, Calibration & Practices s. hental Capabilities he behavior of coarse grain soil hect to water flow.	Europe/US A	No.	1					
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Firm Name:	
Signature:	
Name:	
Designation:	

#### Annex A-1

#### **Special Instructions**

Description		Bid	der	Tech Scrut	Tech Scrutiny to be done by User		
	Yes	No	Alternate Offer	Accepted	Rejected	Reasons of Rejection	
Environment Conditions						-	
(a) Temperature range: 05°C to +40°C							
(b) Relative humidity: 0-70% non-condensing							
Warranty period Two years from the date of commissioning.							
<b>Training Notes</b> Supplier will provide a set of handouts for training on operation and maintenance of the equipment							
Publications Supplier is to provide hard and soft copies (CD) of							
following manuals.							
(a) Operational / Maintenance manual: - Qty 01 with Equipment and							
additional Qty 02 for record purposes and should consist of following sections:-							
(1)Equipment Description /Operation:-							
(a) Specifications							
(b) Description							
(c) Operation							
(2)Servicing:-							
(a) Maintenance Schedule							
(b ) Adjustment / test							
(c) Removal / Installation procedure							
(d) Tools Required							
(3) Trouble shooting guide							
(4) Cleaning requirements							
(b) Full parts description along with detailed diagrams (exploded view).							
(c) <b>Experimental manuals</b> which must contain the list and procedure of							
the experiments that equipment can perform.							
Spares / Technical Support							

<ul> <li>(a) Supplier to have in-country spares / technical support and ensure spares and technical support / assistance for next 10 years</li> <li>(b) Comprehensive list of spares required for scheduled maintenance of Equipment is to be provided</li> <li>(c) Any software provided must have its license</li> <li>(d) Software upgrade support must be provided free of cost for 10 x years with renewed license at every upgrade</li> <li>(e) Supplier must also provide calibration service for at least 5 years after commissioning</li> </ul>			
Additional Spare / Replaceable parts.  (a) Replaceable spare / parts during scheduled inspections are to be identified and provided as per requirement along with equipment sufficient to cater five years consumption.  (b) All specialized / standard tools required for inspection / repair / servicing must be supplied along with equipment.			
<ul> <li>Physical Inspection Criteria</li> <li>100% Physical inspection of store will be carried out before commissioning of the equipment for following details         <ul> <li>a. For physical damage, scratches and deformity.</li> <li>b. Accessories/ Components as per contractual Specifications</li> <li>c. Technical Manuals (Operation Manual, user guide)</li> <li>d. Quality Certificate and calibration certificate by OEM</li> <li>e. OEM certificate and verifiable documents by the supplier that store has been procured from certified source and is factory new and from latest production.</li> <li>f. Brand name and country origin.</li> </ul> </li> </ul>			
Commissioning  (a) Commissioning of the equipment will be carried out by OEM rep at his own cost and risk at designated place at NUTECH.  (b) Any special requirement for installation, operation and commissioning must be specified in the offer by the supplier.			
Training 01 week OEM operational/ maintenance training at NUTECH			
Improvement and Safety Measures Any improvement and safety measures suggested by NUTECH during commissioning are to be resolved by the supplier / manufacturer at no extra cost.			

(a) Verifiable OEM certificate of authorized dealership Supplier is to provide original OEM certificate of subject equipment bought directly from the manufacturer and being an authorized dealer.      (b) In case the equipment supplied is not compatible with specifications, the supplier will be obliged to call his representatives at his own cost for consultation and corrective action			
Special Notes			
(a) Additional requirements for the maintenance of equipment (if any) must be intimated by the supplier in technical offer.			
(b) Supplier must provide the list of organizations using same equipment in			
Pakistan (if any).			
(c) Equipment must be a standard product of OEM available at web			
address of OEM.			
(d) In case of premature failure of the equipment, OEM has to replace /			
rectify the item free of cost. Required transportation charges would be borne			
by the supplier.			

Firm Name:	
Signature:	
Name:	
Designation:	



#### Annex-B

#### **TECHNICAL OFFER**

#### NUTECH / SCM / Civil Lab Eqpt (PSDP) 2020 / TD-108

			HOTEOTT COM / CIVIL EUD EGPt (1	DI / EUEU / ID 100					
<u>Fill i</u>	n follo	wing essential parame	ers:-						
1.	Valid	ity of Offer:	Days (Should not be less than <b>90 da</b>	ays (Should not be less than <b>90 days</b> )					
2.	Deliv	ery period:	Days (After placement of order)	Days (After placement of order)					
3.	Country of Origin:								
4.	Warr	anty Period:							
<u>Gen</u>	<u>eral</u>								
1.	GST	Number:	(Enclose Copy)						
2.	2. NTN / CNIC: (if exempted, provide valid exemption certificate)								
<u>Payr</u>	ment Te	<u>erms</u>							
	Ser	In FOB Cases		In FOR Cases					
	a.	80 % through LC on s	ight.	50% advance payment against BG/CDR/Pay Order/DD					
	b.	20% after delivery,	installation / commissioning, user	50% payment after delivery, installation / commissioning user satisfaction certificate					
		satisfaction certificate.							
<u>Deta</u>	ils of F	_ Foreign Principal Inforr	nation with account details)						
1.	Nam	e / Title:							
2.	Addr	ess:							
OEM Name:			Firm Name:	Signature:					
OEM Focal Person:			Firm Focal Person:	Official Seal:					
OEM	Phone N	lumber:	Firm Phone Number:	Name:					
OEM Email Id:			Firm Email Id:						

#### Annex C

## FINANCIAL OFFER NUTECH / SCM / Civil Lab Eqpt (PSDP) 2020 / TD-108

Ser	Item Name/Size	Specification	A/U	Qty Req	Price Per Unit FOB=USD FOR=PKR	Total Price FOB=USD FOR=PKR
1.	Hydraulic Bench with DAQ System (Compatible with Flow channel, Flow over weir, orifice discharge)	<ul> <li>Mobile, floor-standing service unit for fluid mechanics apparatus</li> <li>Base constructed from robust, corrosion-resistant / stainless steel material</li> <li>Sump tank capacity 130 L (minimum).</li> <li>Volumetric flow measurement via remote sight gauge</li> <li>Stepped tank for low and high flow rates, with capacities 0-55 L</li> <li>Open channel in bench</li> <li>top with quick-release outlet fitting</li> <li>Rapid and easy interchange of the different modules.</li> <li>Required Services, Assembly and Installation, Interface and Control Software, Starting-up, Safety, Maintenance, Calibration &amp; Practices Manuals.</li> <li>User Guide</li> <li>220V/50Hz/1 ph</li> <li>Equipment must be compatible with already held accessories and their relevant software</li> </ul>	No	2		
1a.	Flow over weir apparatus with DAQ (Compatible with Hydraulic bench)	<ul> <li>Weir plates to fit in channel of Hydraulics Bench (Minimum 4 of different shapes)</li> <li>Identical weir height for all weirs</li> <li>Holder for measuring weir to be studied</li> <li>Holder and rectangular weir both with lateral sealing lips</li> <li>Weir plates made of stainless steel</li> <li>Required Services, Assembly and Installation, Interface and Control Software, Starting-up, Safety, Maintenance, Calibration &amp; Practices Manuals.</li> <li>User Guide</li> <li>220V/50Hz/1 ph</li> </ul>	No	2		
2.	Hydrological investigations system with	<ul> <li>Computer controlled hydrology system with DAQ</li> <li>A unit designed to obtain catchment rainfall and runoff values as functions of time</li> <li>Wheeled Unit for easy mobility</li> </ul>	No	1		

	DAO			l	
	DAQ	Overhead square pattern spray nozzles supplying water via a flow control valve,			
		flow meter and solenoid valve.			
		Close water circuit			
		Provide display of the hydrograph			
		Dimensions: 2 m long, 1 m wide and 0.20 m deep (minimum).			
		Lifting system to regulate the tilt.			
		Storage tanks of minimum 180 L with filter and drainage valve			
		Sediment measurement system			
		Hermetic trap doors and meshed trap doors			
		• Adjustable (Height and width) Spray nozzles with ball valves for simulating variety			
		of rainfall patterns at least 8 for even distribution across the tanks			
		<ul> <li>Shower nozzles adjustable in height and length with multiple flows to simulate</li> </ul>			
		storms and local inputs.			
		<ul> <li>Required Services, Assembly and Installation, Interface and Control Software,</li> </ul>			
		Starting-up, Safety, Maintenance, Calibration & Practices Manuals.			
		• 220V/50Hz/1 ph			
		Experimental Capabilities			
		Effect of rainfall of varying duration on the discharge.			
		Effects of wells on the groundwater level over time			
		Determination of the compactness index.			
		Determination of the drainage density.			
		Obtaining of the pressure profiles.			
		<ul> <li>Determination of the water obtained thanks to the gravity force and the field</li> </ul>			
		capacity.			
		Study of groundwater catchment.			
		Study of the cone of depression of a well.			
		Study of the interaction of cones of depression by two adjoining wells.			
	Portable BOD and COD measuring device	Digital BOD and COD measuring device with complete accessories			
		To measure biochemical oxygen demand and chemical oxygen demand in			
		wastewater			
3.		With excellent range, accuracy and resolution	No	4	
		User guide			
		Required Services, Assembly and Installation, Interface and Control Software,			
		Starting-up, Safety, Maintenance, Calibration & Practices Manuals			

		220\//E0U=/4.ph				
		• 220V/50Hz/1 ph Experimental Capabilities				
		<ul> <li>To measure the Biochemical oxygen demand (BOD) of the sample.</li> </ul>				
		<ul> <li>To measure the Biochemical oxygen demand (BOD) of the sample.</li> <li>To measure the Chemical oxygen demand (COD) of the sample.</li> </ul>				
		<ul> <li>Digital TDS meter with complete accessories</li> </ul>				
		Highly precise and accuracy      Lab accuracy & comfort in partiable field instrument.				
		Lab accuracy & comfort in portable field instrument     For manusing turbidity, Total Dispalyed Solida (TDS) conductivity, collinity.				
	Cuanandad	For measuring turbidity, Total Dissolved Solids (TDS) conductivity, salinity,     registricity, density etc.				
	Suspended	resistivity, density etc				
4.	solid particle measurement	User guide     Required Services Assembly and Installation Interface and Control Settings.	No	4		
4.	equipment	Required Services, Assembly and Installation, Interface and Control Software,     Starting up, Sofety, Maintenance, Calibration & Practices Manuals.	INU	4		
	(TDS meter)	Starting-up, Safety, Maintenance, Calibration & Practices Manuals				
	(1DO IIICICI)	• 220V/50Hz/1 ph Experimental Capabilities				
		<ul> <li>To measure the Potassium, magnesium and calcium contents in sample.</li> </ul>				
		·				
		<ul> <li>To measure combined total amount of both inorganic and organic substances dissolved in water.</li> </ul>				
		Digital Multipara meter sampling instrument with complete accessories and				
		consumables				
		As per ISO "Water Quality: Determination of Turbidity"				
		User guide				
		<ul> <li>Required Services, Assembly and Installation, Interface and Control Software,</li> </ul>				
5.	Turbidity meter	Starting-up, Safety, Maintenance, Calibration & Practices Manuals	No	4		
		• 220V/50Hz/1 ph				
		Experimental Capabilities				
		To tests the turbidity of water				
		To measure Total Suspended Solids (TSS) in water				
		Wall mounted oil water filter with data logger and complete accessories				
		<ul> <li>Control panel, valves, process pump, cartridge filters</li> </ul>				
	Partition	<ul> <li>Pipes and fittings</li> </ul>				
6.	Gravimetric	<ul> <li>Oil removal mechanism (minimum capacity ≥ 2 gpm)</li> </ul>	No	1		
0.	equipment	User guide	'*	'		
	- 4 a.bo	<ul> <li>Required Services, Assembly and Installation, Interface and Control Software,</li> </ul>				
		Starting-up, Safety, Maintenance, Calibration & Practices Manuals				
		otarting up, carety, maintenance, cambration & Fractices manuals			1	

		<ul> <li>220V/50Hz/1 ph         Experimental Capabilities</li> <li>To separate gross amounts of oil and suspended solids from the wastewater</li> </ul>			
7.	Constant head permeameter Cell (Compatible with SL10 & SL 12 Impact test UK already held at Lab)	<ul> <li>Constant head (or combination) permeability cell with core cutter, porous base, tie rods and top plate.</li> <li>Tamping rod 8 mm dia. x 300 mm (Compatible to permeability cell)</li> <li>Required Services, Assembly and Installation, Interface and Control Software, Starting-up, Safety, Maintenance, Calibration &amp; Practices Manuals.         Experimental Capabilities     </li> <li>Study the behavior of coarse grain soil with respect to water flow.</li> </ul>	No	1	
		Total			

Tender No	_
Name of the Firm	
Firm Address	
Date	
Telephone No	
F-Mail	

To,

DD SCM Office

NUTECH University

I-12, Main IJP Road,
Islamabad.

#### Dear Sir

- 1. I / We hereby offer to supply to the NUTECH University the stores detailed in schedule to the tender inquiry or such portion thereof as you may specify in the acceptance of tender at the price offered against the said schedule and further agree that this offer will remain valid up to 90 days after opening of Financial offer and will not be withdrawn or altered in terms of rates quoted and the conditions already stated therein or on before this date. I / we shall be bound by a communication of acceptance to be dispatched within he prescribed time.
- 2. I / we have understood the instructions to Tenders and General Conditions Governing Contract available at NUTECH website and have thoroughly examined the specifications / drawing and / or patterns quoted in the schedule here to and am/are fully aware of the nature of the stores required and my/ our offer is to supply stores strictly in accordance with the requirements.

Yours Faithfully.

(Signature of Tenderer)

Designation

Date:

Individual signing tender and / or other documents connected with a contract must be signed by principal authorized rep/ OEM rep/ Authorized partner firm rep.

### BANK GUARANTEE AGAINST "ADNVANCE/PERFORMANCE/WARRANTY GUARANTEE

Which ever is applicable

	Guarantee No Date:
	Amount:
	Valid upto:
In Favour of:	
National University of Technology (NUTECH), IJP	Road, I-12, Islamabad.
Subject: In compliance with terms of Advance/I	Performance/Warranty
<b>Guarantee Bank Guarantee</b>	
Contract No:dated	
Dear Sir,	
1. Whereas your good-self have enter	ed into Contract No:
dated with M/s [Firm	Name] Located at [Firm
Address], Herein after referred to as our custo	mer and that one of the
conditions of the Contract is submission of	Bank Guarantee by our
customer to your good-self for a sum of [Amount].	
2. Incompliance with this stipulation of subj c	contract, we hereby agree
and undertake as under:-	
a. To pay to you unconditionally on dem	and and / or without any

- b. To keep this Guarantee in force till [Validity Date].
- c. That the validity of this Bank guarantee shall be kept two clear year ahead of the original / extended delivery period or the warrantee of the stores which so ever is later in duration on receipt of information from your office. Our liability under this Bank Guarantee shall cease on the closing of banking hours on the last date of validity of this Bank Guarantee. Claim received there after shall not been entertained by us whether you suffer a loss or not. On receipt of payment under this Guarantee, this

reference to our Customer an amount not exceeding the sum of

[Amount] as would be mentioned in your written Demand Notice.

- documents i.e., Bank Guarantee must be clearly cancelled, discharged and returned to us.
- d. That we shall inform your office regarding termination of the validity of this bank Guarantee on clear month before the actual expiry date of this Bank Guarantee.
- e. That with the consent of our customer you may amend / alter any term / cause of the contractor add / delete any term / clause to / from this contract without making any reference to us. We do not reserve any right to receive any such amendment / alternation or addition / deletion provided such like actions do not increase our monetary liability under this Bank Guarantee which shall be limited only [Amount......].
- f. That the bank guarantee herein before given shall not be affected by any change in the constitution of the Bank or Customer / Supplier or Vendor.
- g. That this is an unconditional Bank guarantee, which shall been cashed on sight on presentation without any reference to our Customer / Supplier or Vendor.

Signature	_
Name	_
Desig	_
Bank Stamp	

Note: No changes in the above given BG format shall be accepted.

#### "SELLER'S WARRANTY"

(To be provided on stamp paper)

Contract No: _	Dated:	
Validity 2 <u>years</u>	from the date of final acceptance of the Stores.	
provision manufarmeans.  2. We spares.  Contract a.  b.	e hereby warrant and undertake that the Stores and all the accessories supplied under the terms and conditions	nothing in the unauthorized he associated of the above d quality and if during the under normal rances stated ance with the removal, reor their parts
	ceptance of the Stores.	
	Signature	)
	Name	
	Desig	<del></del>
	Stamp	
	Date	

Date

Signature of Firm Auth Signatory

#### **CHECK LIST**

#### (This checked list must be attached with your technical offer, duly filled and

#### Signed by authorized signatory)

Note: Fill and/or mark Yes/No where required

**Tender No** 

		<del></del>					
1	Tender Processing	a. Tender processing fee ref no	. Tender processing fee ref no				
	Fee	b. Bank					
		c. Amount		_			
2	EM/ Bid Bond	a. EM/ Bid Bond ref no		_			
		b. Bank		-			
3	Form Annex A, A-1	B and C signed by Authorized	Yes	No			
	Signatory						
4	Offering specification	Yes	No				
5	Quoted Currency as	per IT	Yes	No			
6	Accounting unit/Qty	as per IT	Yes	No			
7	Delivery Schedule as	s per IT	Yes	No			
8	Country of origin of store						
9	Name of OEM:						
10	Original Performa in	voice (Mandatory)	Yes	No			
11	Certified that there is no Deviation from IT conditions/			No			
	there is deviation from IT condition as per fol details						
12	Blacklisting certificat	e.	Yes	No			
13	Verifiable OEM Certi	ficate	Yes	No			
14	Warranty Period as p	No					
15	5 ATPs provided Yes N						