



TENDER DOCUMENTS

Civil lab

NUTECH/SCM/ Civil Lab Phase III -2019/TD-088

NATIONAL UNIVERSITY OF TECHNOLOGY

TENDER NOTICE

National University of Technology (NUTECH)

NUTECH/SCM/ Civil Lab Phase III-2019/TD-088

Sealed bids are invited from Government / FBR Registered Firms for the procurement of Civil Lab Equipment for Civil lab at NUTECH

1. Tender documents containing terms & conditions and detailed specifications of items can be downloaded from NUTECH website "<https://nutech.edu.pk/d-p.php>" w.e f **26 Aug 2019**.
2. Quotations shall be submitted as per requirement of the tender documents.
3. Bidders will be required to submit bank draft/PO equal to 5% of quoted value as Bid Bond in favor of National University of Technology (NUTECH).
4. Sealed bids with detailed specification should reach on the following address latest by **1430 hours on 12 September 2019**. Late submission will not be entertained.
5. Bids will be opened at **1500 hours on 12 September 2019 at SCM Office**.
6. Project is to be completed in **90 days** from the date of award of contract.
7. Submit Rs 1500/- as Tender fee in favour 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.

Deputy Director (Supply Chain Management Office)
NATIONAL UNIVERSITY OF TECHNOLOGY (NUTECH) UPROAD, SECI-12,
ISLAMABAD
Tel: 0092-51-5476768, Ext: 178



NATIONAL UNIVERSITY OF TECHNOLOGY

SUPPLY CHAIN MANAGEMENT OFFICE

INVITATION TO TENDER

Submission Date/Time 12 September 2019 at 1430 hours

1. NUTECH desires to procure the list of item(s)/Store(s) as per **Annexure-A**. Interested bidders are requested to send their bids through courier or deliver at NUTECH under two separate sealed envelopes (placed together in third envelope), marked clearly, **"Technical Offer"** and **"Commercial Offer"**, respectively to the undersigned, latest by or before above mentioned due date. If due to any unforeseen circumstances, NUTECH establishment remains closed, then the last date of submission will be extended to next working day.

2. Please also note that Technical Offer should contain only Annexes-A & B duly filled in (supported with relevant technical literature /details/ catalogues etc) and receipt of tender processing fee. Commercial Offer will contain Annexure-C and bid bond (Dully mentioned and placed in separate envelope). Please ensure no space is left blank in the annexes.

3. Following must be noted for this IT (Invitation to Tender):-

- a. 4 x copies of technical offer are to be provided.
- b. Annexes A, B and C must be signed and stamped. Attach only relevant documents.
- c. Please complete all document as per given format. Do not use your format or letter head. Offer may be rejected if given format is not followed.
- d. Validity of offer will be 90 days.
- e. Delivery period will be 90 days from the date of award of contract.
- f. The firm should provide point to point acceptance of each clause of IT and special instructions attached with IT.
- g. Firm will render a certificate with technical offer that firm is neither defaulter nor blacklisted by any Government / semi Government organization directly or indirectly.
- h. Commercial Offer must be accompanied with a Bid Bond in agreement of faithful compliance of the conditions of Contract/Purchase Order. This amount will be equivalent to 5% of the total quoted value. In case of non-acceptance of any offer, the Bid Bond will be returned to the bidder by fastest possible means. The Bid Bond amount submitted by the

successful bidder will however be refunded on effective termination of Contract/ Purchase Order. (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.

- i. Rates should be quoted on Free Delivery basis at NUTECH Islamabad.
- j. 2 year warranty against 5% bank guarantee will be required from the successful bidders from the date of commissioning as performance bond against warranty/Guarantee
- k. Bid Bond may be used as performance guarantee till the delivery of stores, otherwise separate performance guarantee valued at 5 % of contract value will be submitted by successful firm till stores are delivered and inspected
- l. 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 contract value, in any way.
- m. If even after applicability of 10% LD, the Seller fails to deliver the required stores, the Buyer will be at liberty to procure the stores from an alternate source, on the Seller's "Risk & Cost". In that case, the Seller will be bound to make payment to the new source through NUTECH
- n. 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 and binding on the Supplier / Seller.
- o. Bidders must provide authorization certificate from OEM which will be verified
- p. Bidders to provide OEM/Principal Performa invoice with tech bid
- q. An appropriate amount may be paid for mobilization against Bank Guarantee/CDR/Demand Draft/Pay Order
- r. Partial payment/partial delivery allowed

4. We reserve the rights to accept or reject any or all tenders as a whole or in part without assigning any reason whatsoever. The decision in this regard will be firm, final and binding on all bidders.

DD (Supply Chain Management)



NATIONAL UNIVERSITY OF TECHNOLOGY

SUPPLY CHAIN MANAGEMENT OFFICE

TECHNICAL OFFER

Annex A

User Reference No **NUTECH/SCM/ Civil Lab -2019/TD-088**

Date: **19-08-2019**

Technical Specification

Ser	Part No	Item Name/Size	Specification	A/U	Country of Origin	Qty Req	Bidder Compliance		Tech Scrutiny to be done by user	
							Yes	No	Accepted	Rejected
									Reason of Rejection	
1.		Strut test apparatus with weights	<ul style="list-style-type: none"> • Five different length struts of aluminum, Each of nominal 20 mm x 2 mm cross section. • Dial gauge, with a measuring range of 0-5mm. and accuracy of 0.01 mm / Weights • Operating temp: -1°C to +40°C • One cable for computer display and data acquisition. • Simulation software. • User Guide • Vernier Calliper • 220V/50Hz/1 ph <p>** Compatible with structures platform (CST 100- Cussons) or equivalent, otherwise strut bench top unit</p>	No.	Europe/UK/USA	1				

			required							
2.		Unsymmetrical Cantilever Apparatus	<ul style="list-style-type: none"> • Bench top unit • Beams of I, L, U and rectangular cross-section of aluminium/ specimen • Two dial gauges of 0-25 mm and 0.01 mm accuracy, to measure Δ_u and Δ_v deflections. • Complete Weights set (10-20-50-100-200 gm) • Supporting hook • Accessory for determining the torsion center of a beam. • User Guide 	No.	Europe/UK/USA	1				
3.		Metal Impact testing machine (charpy tester)	<ul style="list-style-type: none"> • Conforming to ASTM-E23 • Mini. Impact energy 300J with 2.5J graduation, falling angle: 150°, Pendulum mass 22 kg • Cast iron frame • Pendulum with hardened knife • Brake device to stop the pendulum • Complete Specimen set • User Guide • 220V/50Hz/1 ph 	No.	Europe/UK/USA	1				
4.		Pascal apparatus	<ul style="list-style-type: none"> • Lever arm with sliding weight and 	No.	Europe/UK/USA	1				

			<p>spirit level measures force at the base of the vessel</p> <ul style="list-style-type: none"> • Glass vessels of different shapes (at least three) • Straight shaped vessel with internal diameter of 26 mm. Conical vessel with internal diameter from 26 mm. to 80 mm. Inverted conical vessel with internal diameter from 26 mm. to 10 mm. • weight-adjustable pointer enables all vessels to be filled to a common depth • Fastening nut for leveling. • Vertical rod with portable indicator to fix the fluid level in the vessels. • User Guide 							
5.		Particles Drag coefficient apparatus	<ul style="list-style-type: none"> • Two transparent measuring cylinders of max. dia 120 mm/ tubes with fluorescent light • Cylinder should have valves to aid the removal of particles from the bottom of the tubes • Complete sphere set (5-10-15-20-25 mm) • Beaker (mini. .5 L) 	No.	Europe/UK/USA	1				

			<ul style="list-style-type: none"> • Cable & accessories • User Guide • 220V/50Hz/1 ph 							
6.	FME18	Flow meter demonstration with software	<ul style="list-style-type: none"> • Manometer range: 0 to 500 mm. of water column (minimum). • Number of manometric tubes = minimum 8 • Orifice plate • Flowmeter • Venturi • User Guide • 220V/50Hz/1 ph ** Compatible with Hydraulic bench FME00 and its BDAS or equivalent	No.	Europe	1				
7.		Auto Level with tripod and accessories	<ul style="list-style-type: none"> • 32x/28x Magnifications • Accuracy = 1 mm/km • Rapid, accurate, and stable automatic compensation • Ultra short focusing • Water resistant and all weather dependability • Clampless, Endless Fine Horizontal Adjustments • User Guide 	No.	Any	4				
8.		Electronic total station with tripod stand	<ul style="list-style-type: none"> • Heavy duty Software electronic total station with accessories • Min. 30x / 1 " / 4000m • Tripod stand • Prism set 	No.	Any	2				

			<ul style="list-style-type: none"> • User Guide 							
9.		Electronic theodolite with tripod and accessories	<ul style="list-style-type: none"> • Heavy duty Electronic digital theodolite with accessories • Min. 30x - 1" / 5" - 3000m • Tripod stand • User Guide 	No.	Any	3				
10.		Hand held GPS	<ul style="list-style-type: none"> • Minimum resolution with 240 x 320 display pixels, 2.2 inch color display • High-sensitivity, WAAS-enabled GPS receiver • Water proof • Min. 4 GB (expandable) internal memory • USB interface • User Guide 	No.	Any	4				
11.		Prism set	<ul style="list-style-type: none"> • Compatible with Stonex R1 Plus total station (Phase-1 item) • Accuracy and range compliance certificate required 	No.	Any	1				
12.		Eagle point (Software)	<ul style="list-style-type: none"> • Latest version • User Guide 	No.	USA	1				
13.		VeBe apparatus	<ul style="list-style-type: none"> • As per ASTM-C1170 • VeBe Consistometer with standard accessories • Sliding weight 12.5 Kg to ASTM C1170 • Sliding weight 9 Kg, 	No.	Europe/UK/USA	2				

			<p>steel cylinder mould, dia 150x300 mm and mould fixing plate, compliant to ASTM C1176.</p> <ul style="list-style-type: none"> • User Guide • 220V/50Hz/1 ph 						
14.		Vicat apparatus	<ul style="list-style-type: none"> • As per ASTM C19 • Metallic vicat frame • 10 mm dia. consistency plunger • 1 mm dia. ardened needles • Conical moulds • Glass base plate • User Guide 	No.	Europe	3			
15.		Compressive extensive meter with gauges	<ul style="list-style-type: none"> • As per ASTM C469 • To measure both axial deformation and diametrical extension of cylinder specimens dia. 6"x 12" to 8"x 12" under compression stress. • Gauges/linear strain transducers (minimum two). • User Guide 	No.	Europe/UK/USA	1			
16.		Ring and ball, pouring plate, guides ring holder	<ul style="list-style-type: none"> • Automatic ring and ball apparatus with standard accessories • Conforming to ASTM-D36 & AASHTO-T53 • Ring holder/ assembly, two brass rings, two brass ball centering guides, two steel balls, pouring plate, Glass vessel. 	No.	Europe/UK/USA	1			

			<ul style="list-style-type: none"> • User Guide • 220V/50Hz/1 ph 							
--	--	--	--	--	--	--	--	--	--	--

Instl/Assy/Commissioning Req	Yes ✓	No	Contract with OEM/Supplier	Yes ✓		No	
Performance Bond Req	Yes ✓	No	Offer Req for Package Deal	Yes		No ✓	
Note: (If any)			Warranty req and Duration	Yes ✓		No	
List of "Additional Req may be" sent to procurement office, immediately							
Maint Spare Req	Yes ✓	No	Essentially Running spare req	Yes		No	
Pub/Lit Req	Yes ✓	No	Req of Cert for test data results	Yes ✓		No	
Trg Req	Local ✓	Foreign	Req of Calibration	Yes ✓		No	
Note: Tick relevant box							

Special Instructions

Description	Bidder			Tech Scrutiny to be done by User		
	Yes	No	Alternate Offer	Accepted	Rejected	Reasons of Rejection
<p>Warranty period Two years from the date of commissioning. A warranty sticker is to be pasted on each imported item by the Supplier / OEM highlighting Name of Firm, Contract No and date, Description of Store and Warranty validity</p>						
<p>Training Notes Supplier will provide a set of handouts for training on operation and maintenance of the equipment</p>						
<p>Publications Supplier is to provide hard and soft copies (CD) of following manuals.</p> <p>(a) Operational / Maintenance manual: - Qty 01 with Equipment and additional Qty 02 for record purposes and should consist of following sections:-</p> <p style="padding-left: 20px;">(1)Equipment Description /Operation:-</p> <p style="padding-left: 40px;">(a)Specifications</p> <p style="padding-left: 40px;">(b)Description</p> <p style="padding-left: 40px;">(c)Operation</p> <p style="padding-left: 20px;">(2)Servicing:-</p> <p style="padding-left: 40px;">(a)Maintenance Schedule</p> <p style="padding-left: 40px;">(b)Adjustment / test</p> <p style="padding-left: 40px;">(c)Removal / Installation procedure</p> <p style="padding-left: 40px;">(d)Tools Used</p> <p style="padding-left: 20px;">(3) Trouble shooting guide</p> <p style="padding-left: 20px;">(4) Cleaning requirements</p> <p style="padding-left: 20px;">(5) Shipping and receiving</p> <p style="padding-left: 20px;">(6) Storage requirements</p> <p>(b) IPB (Illustrated Parts Breakdown Manual) should have full parts description along with detailed diagrams (exploded view).</p>						
<p>Spares / Technical Support</p> <p>(a) Supplier to have in-country spares / technical support and ensure spares and technical support / assistance for next 10 years</p>						

<p>(b) Comprehensive list of spares required for scheduled maintenance of Equipment is to be provided</p> <p>(c) Any software provided must have its license</p> <p>(d) Software upgrade support must be provided free of cost for 10 x years with renewed license at every upgrade</p> <p>(e) Supplier must also provide calibration service for at least 5 x years after commissioning</p>						
<p>Additional Spare / Replaceable parts.</p> <p>(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.</p> <p>(b) All specialized / standard tools required for inspection / repair / servicing must be supplied along with equipment.</p>						
<p>Physical Inspection Criteria: 100% physical inspection of store will be carried out before commissioning of the equipment for following details:-</p> <p>(a) For physical damage, scratches and deformity.</p> <p>(b) Accessories /components as per contractual specifications.</p> <p>(c) Technical Manuals (Operation manual, user guide, IPBs).</p> <p>(d) Quality certificate and calibration certificate by the OEM</p> <p>(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.</p> <p>(f) Brand name and country of origin.</p>						
<p>Commissioning</p> <p>(a) Commissioning of the equipment will be carried out by OEM rep at his own cost and risk at designated place at</p>						

<p>NUTECH. (b) Any special requirement for installation, operation and commissioning must be specified in the offer by the supplier.</p>						
<p>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.</p>						
<p>Liability of Supplier (a) 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</p>						
<p>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.</p>						

<p>Firm Name_____</p> <p>Signature_____</p> <p>Name_____</p> <p>Designation_____</p>
--



NATIONAL UNIVERSITY OF TECHNOLOGY
SUPPLY CHAIN MANAGEMENT OFFICE

TECHNICAL OFFER

Annex B

User Reference No **NUTECH/SCM/ Civil Lab Phase III-2019/TD-088**

Date: **19-08-2019**

Please fill in the following essential parameters:

1. Validity of Offer: _____ Days (Should not be less than 90 days)
2. Delivery Period: _____ Days (After Placement of order)
3. Country of Origin: _____

General

GST No: _____ (Please enclose copy)

NTN/CNIC: _____ (if exempted, please provide valid exemption certificate)

Payment Terms:

1. 50 % advance payment against BG/CDR/Pay Order/DD
2. 50% payment after delivery, installation /commissioning, user satisfaction certificate.

Details of Payment Recipient

(1) Name/Title: _____

(2) Address: _____

OEM Name: _____

Signature: _____

Focal Person: _____

Official Seal: _____

Phone Number: _____

Name : _____

Email Address: _____

Designation: _____



NATIONAL UNIVERSITY OF TECHNOLOGY

SUPPLY CHAIN MANAGEMENT OFFICE

FINANCIAL OFFER

User Reference No **NUTECH/SCM/ Civil Lab Phase III-2019/TD-088**

Annex C
Date: **19-08-2019**

Ser	Part No	Item Name/Size	Specification	A/U	Country of Origin	Qty Req	Unit Price (Rs) (Incl all taxes)	Total amount for total qty (Rs) (Incl all taxes)
1.		Strut test apparatus with weights	<ul style="list-style-type: none"> • Five different length struts of aluminum, Each of nominal 20 mm x 2 mm cross section. • Dial gauge, with a measuring range of 0-5mm. and accuracy of 0.01 mm / Weights • Operating temp: -1°C to +40°C • One cable for computer display and data acquisition. • Simulation software. • User Guide • Vernier Calliper • 220V/50Hz/1 ph Compatible with structures platform (CST 100- Cussons) or equivalent, otherwise strut bench top unit required	No.	Europe/UK/USA	1		
2.		Unsymmetrical Cantilever Apparatus	<ul style="list-style-type: none"> • Bench top unit • Beams of I, L, U and rectangular cross-section of aluminium/ 	No.	Europe/UK/USA	1		

			<ul style="list-style-type: none"> specimen Two dial gauges of 0-25 mm and 0.01 mm accuracy, to measure Δ_u and Δ_v deflections. Complete Weights set (10-20-50-100-200 gm) Supporting hook Accessory for determining the torsion center of a beam. User Guide 					
3.		Metal Impact testing machine (charpy tester)	<ul style="list-style-type: none"> Conforming to ASTM-E23 Mini. Impact energy 300J with 2.5J graduation, falling angle: 150°, Pendulum mass 22 kg Cast iron frame Pendulum with hardened knife Brake device to stop the pendulum Complete Specimen set User Guide 220V/50Hz/1 ph 	No.	Europe/UK/USA	1		
4.		Pascal apparatus	<ul style="list-style-type: none"> Lever arm with sliding weight and spirit level measures force at the base of the vessel Glass vessels of different shapes (at least three) Straight shaped 	No.	Europe/UK/USA	1		

			<p>vessel with internal diameter of 26 mm. Conical vessel with internal diameter from 26 mm. to 80 mm. Inverted conical vessel with internal diameter from 26 mm. to 10 mm.</p> <ul style="list-style-type: none"> • weight-adjustable pointer enables all vessels to be filled to a common depth • Fastening nut for leveling. • Vertical rod with portable indicator to fix the fluid level in the vessels. • User Guide 					
5.		Particles Drag coefficient apparatus	<ul style="list-style-type: none"> • Two transparent measuring cylinders of max. dia 120 mm/ tubes with fluorescent light • Cylinder should have valves to aid the removal of particles from the bottom of the tubes • Complete sphere set (5-10-15-20-25 mm) • Beaker (mini. .5 L) • Cable & accessories • User Guide • 220V/50Hz/1 ph 	No.	Europe/UK/USA	1		
6.	FME18	Flow meter demonstration with software	<ul style="list-style-type: none"> • Manometer range: 0 to 500 mm. of water column (minimum). • Number of 	No.	Europe	1		

			<p>manometric tubes = minimum 8</p> <ul style="list-style-type: none"> • Orifice plate • Flowmeter • Venturi • User Guide • 220V/50Hz/1 ph <p>Compatible with Hydraulic bench FME00 and its BDAS or equivalent</p>					
7.		Auto Level with tripod and accessories	<ul style="list-style-type: none"> • 32x/28x Magnifications • Accuracy = 1 mm/km • Rapid, accurate, and stable automatic compensation • Ultra short focusing • Water resistant and all weather dependability • Clampless, Endless Fine Horizontal Adjustments • User Guide 	No.	Any	4		
8.		Electronic total station with tripod stand	<ul style="list-style-type: none"> • Heavy duty Software electronic total station with accessories • Min. 30x / 1 " / 4000m • Tripod stand • Prism set • User Guide 	No.	Any	2		
9.		Electronic theodolite with tripod and accessories	<ul style="list-style-type: none"> • Heavy duty Electronic digital theodolite with accessories • Min. 30x - 1"/5" - 3000m 	No.	Any	3		

			<ul style="list-style-type: none"> • Tripod stand • User Guide 					
10.		Hand held GPS	<ul style="list-style-type: none"> • Minimum resolution with 240 x 320 display pixels, 2.2 inch color display • High-sensitivity, WAAS-enabled GPS receiver • Water proof • Min. 4 GB (expandable) internal memory • USB interface • User Guide 	No.	Any	4		
11.		Prism set	<ul style="list-style-type: none"> • Compatible with Stonex R1 Plus total station (Phase-1 item) • Accuracy and range compliance certificate required 	No.	Any	1		
12.		Eagle point (Software)	<ul style="list-style-type: none"> • Latest version • User Guide 	No.	USA	1		
13.		VeBe apparatus	<ul style="list-style-type: none"> • As per ASTM-C1170 • VeBe Consistometer with standard accessories • Sliding weight 12.5 Kg to ASTM C1170 • Sliding weight 9 Kg, steel cylinder mould, dia 150x300 mm and mould fixing plate, compliant to ASTM C1176. • User Guide • 220V/50Hz/1 ph 	No.	Europe/UK/USA	2		

14.		Vicat apparatus	<ul style="list-style-type: none"> • As per ASTM C19 • Metallic vicat frame • 10 mm dia. consistency plunger • 1 mm dia. ardened needles • Conical moulds • Glass base plate • User Guide 	No.	Europe	3			
15.		Compressive extensive meter with gauges	<ul style="list-style-type: none"> • As per ASTM C469 • To measure both axial deformation and diametrical extension of cylinder specimens dia. 6"x 12" to 8"x 12" under compression stress. • Gauges/linear strain transducers (minimum two). • User Guide 	No.	Europe/UK/USA	1			
16.		Ring and ball, pouring plate, guides ring holder	<ul style="list-style-type: none"> • Automatic ring and ball apparatus with standard accessories • Conforming to ASTM-D36 & AASHTO-T53 • Ring holder/ assembly, two brass rings, two brass ball centering guides, two steel balls, pouring plate, Glass vessel. • User Guide • 220V/50Hz/1 ph 	No.	Europe/UK/USA	1			
Total Amount Pakistani Rupees									

Bid Bond Ref # _____ Total GST _____

Total Value (Incl Tax) _____

*Bid Bond to be attached with Annex C. Copy of Bid Bond be attached with technical offer without showing its value. Exposure of bid bond may result in rejection of offer.

Firm Name _____
Signature _____
Name _____
Designation _____