

COMSATS University Islamabad
Sahiwal Campus

TENDER DOCUMENTS

For

**Procurement of Equipment for Concrete, Water Supply, Highway and
Mechanics of Solids Labs, Civil Engineering Department, CUI Sahiwal
Campus**

(Single Stage Two Envelop Procedure)

Submission and Opening Date for Tender:

March 24, 2021(Wednesday)

Submission Time for Technical and Financial Proposals: 1430 hours

Opening Time (only Technical Proposals): 1500 hours

Tender Issued to M/s _____

March 2021



Purchase and Store Department

COMSATS Road, Off G.T.Road, Sahiwal

Tel: 040-4305666-Ext-128 & 186

Web: <https://www.sahiwal.comsats.edu.pk/Tenders.aspx>

Signature & Stamp of Bidder

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Invitation to Bid

(CUI/SWL/Procurement/FY 20-21/130)

Procurement of Equipment for Civil Engineering Department, CUI Sahiwal Campus

COMSATS University Islamabad (CUI), Sahiwal Campus, a public sector university of Ministry of Science & Technology (MoST) invites sealed bids from the **Original Equipment Manufacturers (OEM)/ authorized distributors** registered with Income Tax and Sales Tax departments and who are also on Active Taxpayers list (ATL) of FBR for the work titled **“Procurement of Equipment for Concrete, Water Supply, Highway and Mechanics of Solids Labs, Civil Engineering Department, CUI Sahiwal Campus”**.

- 2) Bidding documents containing detailed terms and conditions, method of procurement, procedure for submission of bids, bid security, bid validity, opening of bid, evaluation criteria, clarification/rejection of bids, performance guarantee etc. are available for the interested bidders at **“Purchase and Store Department, COMSATS Road, Off G.T.Road, Sahiwal”**. The non-refundable fee of bidding document is **Rs. 1,000 (One Thousand Rupees Only)** in shape of Pay Order/Demand Draft in favor of CUI, Sahiwal.
- 3) The bids prepared in accordance with the instructions in the bidding documents must reach **“Purchase and Store department, COMSATS Road, Off G.T.Road, Sahiwal”** on or before **1430 hours on March 24, 2021 (Wednesday)**. Bids will be opened at **1500 hours** on the same day in the presence of bidder's representatives who choose to attend at the same address. This advertisement is also available on the PPRA's website at **www.ppra.org.pk** and on the Campus website at **https://www.sahiwal.comsats.edu.pk/Procurement/Tenders.aspx**.



“SAY NO TO DRUGS”

Muhammad Nadeem Rana
In charge Purchase and Store Department
COMSATS University Islamabad, Sahiwal Campus
(A public sector University of Ministry of Science & Technology)
COMSATS Road off G.T. Road, Sahiwal.
Tel: 040-4305666-Ext-128-186 **Mob:** 0300-6364379
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www.comsats.edu.pk

For Technical Queries/Concerned Department
Dr. Engr. Sadam Hussain
HoD/Civil Engineering Department
Cell Ph. +92 333 7131325, +92 304 1938240
Email: sadamhussain@cuisahiwal.edu.pk

TERMS AND CONDITIONS OF THE TENDER

- 1. Eligible Bidders.** - Bidding is open to all firms and persons meeting the following requirements:
 - a) Registered with Income and Sales Tax Departments, Government of Pakistan
 - b) and who are on Active Taxpayers List (ATL) of Federal Board of Revenue (FBR), Government of Pakistan.

- 2. Tender Document Fee (Non-Refundable).** - Bidding documents along with Pay Order / Demand Draft amounting to **Rs. 1,000/-** as a tender documents fee (Non-Refundable) shall be submitted in favor of COMSATS University Islamabad, Sahiwal Campus to the address given below. No bid will be accepted without the tender documents' fee. Attach Tender document fee with the Technical Proposals.

- 3. Bid Security (Refundable).** - The bidder is required to furnish in the form of Deposit at Call (CDR) or a Bank Guarantee issued by a Scheduled Bank in Pakistan equivalent to 2% of the total bid price as a Bid Security in favor of "COMSATS University Islamabad, Sahiwal Campus". Any bid not accompanied by acceptable bid security shall be rejected by the Employer as non-responsive and without any right of appeal. Attach Earnest money with the Financial Proposals.
 - a. The bid securities of unsuccessful bidders will be returned upon award of contract/Issuance of Purchase Order to the successful bidder or expiry of the validity of Bid Security whichever is earlier.
 - b. The Bid Security may be forfeited:
 - i. If a bidder withdraws his bid during the period of bid validity
 - ii. If a bidder does not accept the correction of his bid price
 - iii. in case of a successful bidder, if he fails to sign the contract agreement or execute the work as specified in the bill of quantities (BoQ).
 - iv. in case of non-performance of the contract, delayed supply/installations or substandard supply/installation, short in quantity, the security deposit will be forfeited and the firm will be blacklisted.

- 4. Performance Guarantee (Refundable): Warranty will be One Year.** However, 10% of the total value of the Invoice or a Bank Guarantee issued by a Scheduled Bank in Pakistan will be retained as security by COMSATS University Islamabad, Sahiwal Campus which will be released after **Twelve Months** from the date of delivery / completion of work / supply. Insurance Guarantee is not acceptable. After finalization of the bid and signing contract, performance guarantee within twenty-eight days is required to be submitted and bid security is to be released.

- 5. Bid validity.** - All prices should be valid for at least **90 days from the date of opening of Financial Proposals.** Withdrawal or any modification of the original offer within the validity period shall entitle CUI, Sahiwal Campus to forfeit the earnest money in favor of the CUI, Sahiwal Campus and / or put a ban on such vendor participation in CUI, Sahiwal Campus tenders / works

- 6.** The Purchase/Work Order will be awarded on **Item Wise Basis.**

7. The interested vendors can submit their Financial Proposal in the following ways:

Option-I (Pak Rupees)

- i. Unit Cost of the equipment with all applicable Taxes, Packing, Delivery at COMSATS University Islamabad, Sahiwal Campus's premises, Installation and Training Charges in Pak Rupees.

Option-II (CFR)-Total CFR Karachi by Sea-Currency Code and Amount

- ii. Unit Cost with all Cost and Freight including standard packing charges in CFR and to be delivered at Karachi Seaport. COMSATS University Islamabad, Sahiwal Campus will open the direct irrevocable Letter of Credit (LC) at sight in favor of the Principal and will also clear the shipment from Custom Authorities of Karachi. Transportation Charges from Karachi to CUI Sahiwal Campus will be borne by the authorized distributor in Pakistan after Custom clearance of equipment by CUI-Sahawal Campus. Transshipment is allowed and partial shipment is not allowed. Please clearly specify the country of origin and beneficiary details.
- iii. The Unit Cost must also be inclusive of Installation and Training Cost. This cost can be provided in Pak Rupees with Financial Proposals.
- iv. After the opening of the Financial Proposals of the technically accepted bids, the Purchase and Technical Committees of the University will decide the option in the best interest of the University.

8. Delivery time or Completion Schedule. – The exact completion/delivery time from the date of the purchase / work order will be **90** days. The handing over / completion time for this contract is of critical importance.

9. All pages (BoQs & Terms & Conditions) are mandatory to be signed / stamped, failing which the bid may be rejected.

10. Any addition, deletion or modification of any clause of the procurement terms & conditions of CUI by any vendor will not be accepted and may lead to the rejection of the bid.

11. Site Visits/Concerned Office. - Before quoting, the bidder in his own interest can visit to know the specifications of each item in the **Store Section of CUI Sahiwal Campus OR Concerned Office**. This will help him in proper assessment of the work. Failure to do so will not absolve the vendor of his responsibility to carry out the work as specified in the tender documents. The cost of visiting the site shall be borne by the vendor and shall be at his own responsibility and risk.

12. The bid form (BoQs) must be duly filled in, stamped and signed by the authorized representative of the bidder.

13. Method of Procurement. – COMSATS University Islamabad, Sahiwal Campus, will follow the PPRA rule of **Single Stage Two Envelope Procedure**;

- i. The bid shall comprise a single package containing **two separate envelopes**. Each envelope shall contain separately the **Financial Proposal** and the **Technical Proposal**;
- ii. The envelopes shall be marked as **“FINANCIAL PROPOSAL”** and **“TECHNICAL PROPOSAL”** in bold and legible letters to avoid confusion;
- iii. Initially, only the envelope marked **“TECHNICAL PROPOSAL”** shall be opened;
- iv. The envelope marked as **“FINANCIAL PROPOSAL”** shall be retained in the custody of the procuring agency without being opened;
- v. The procuring agency shall evaluate the technical proposal in a manner prescribed in advance, without reference to the price and reject any proposal which does not conform to the specified requirements;
- vi. During the technical evaluation no **amendments** in the technical proposal shall be permitted;
- vii. The financial proposals of bids shall be opened publicly at a time, date and venue announced and communicated to the bidders in advance;
- viii. After the evaluation and approval of the technical proposal the procuring agency, shall at a time within the bid validity period, publicly open the financial proposals of the technically accepted bids only. The financial proposal of bids found technically nonresponsive shall be returned unopened to the respective bidders;
- ix. and the bid found to be the lowest evaluated bid shall be accepted.

14. Submission and Opening of bids. - The bid should be submitted in a sealed envelope in such manner that the contents are fully enclosed and cannot be known until duly opened. The sealed bids must reach up to **March 24, 2021 (Wednesday)** on or before **1430 hours** and will be opened on the same date **at 1500 hours** in the presence of available bidders. All bids submitted after the time prescribed shall be rejected and returned without being opened.

15. In case, the opening date is declared as a public holiday by the Government, the next working day shall be deemed the date for submission and opening of the tender at same time and venue.

16. After the opening of bids, COMSATS University Islamabad, Sahiwal Campus will examine the bids for completeness as per the tender document.

17. The envelope should be marked as under;

Secretary, Purchase Committee COMSATS University Islamabad, Sahiwal Campus
COMSATS Road, Off G.T Road, Sahiwal. Tel: 040-4305001-05, Ext: 128 The envelope shall also bear the word “CONFIDENTIAL” and following identification quotation of **“Procurement of Equipment for Concrete, Water Supply, Highway and Mechanics of Solids Labs, Civil Engineering Department, CUI Sahiwal Campus”**.

18. Clarification of bids. - After the opening of bids, bidders are not allowed to alter or modify his bid. However, the procuring agency may seek and accept clarifications to the bid that do not change the substance of the bid.

19. Arithmetic Errors. - The Tender shall be checked for any arithmetic errors which shall be rectified. The Tender Price as determined after arithmetic corrections shall be termed as the Corrected Total Tender Price which shall be binding upon the vendor.

20. Evaluation of bids. - Bids will be evaluated in accordance with the evaluation criteria and other terms and conditions set forth in the bidding documents.

21. Evaluation Criteria: Technical bids will be evaluated on the basis of following criteria:

- The Tender will be evaluated on the **Item Wise Basis.**
- The vendors will provide literature of quoted brands which will be evaluated as per the specifications provided in the tender documents.
- In case of the authorized distributor of the quoted brand, please attach a valid authorization certificate from the Principal/Manufacturer with the Proposal. **Preference will be given to the OEM/Authorized distributor of the quoted brand.**
- Warranty for equipment will be on the part of the supplier, which is **One Year on-site with Parts Replacement Warranty** starting from the date of job completion. Please attach a letter for **warranty coverage**. Faculty/Dead parts will be replaced during the warranty period instead of repairing.
- The vendors will warrant to the COMSATS University Islamabad, Sahiwal Campus on their letterhead that the equipment is genuine, brand new, non-refurbished, unaltered in any way and has no defect, arising from design, materials and workmanship.
- Customized Company Profile. Detail of technical staff and facilities including equipment and labs for after-sales services. Detail of Head Office, Sub-offices with telephone numbers, email addresses, focal person and setup for after-sales services.
- Experience of the firm for supplying equipment to any Federal or Provincial Government Department, Agency, Organization or autonomous body or Private Sector Organization anywhere in Pakistan. Documentary evidence in the form of Work/Purchase orders must be provided with the technical proposal.
- The Vendor is a bidder who has not been blacklisted by any Federal or Provincial Government Department, Agency, Organization or autonomous body or Private Sector Organization anywhere in Pakistan. The vendor will provide this undertaking on a judicial stamp paper with Technical Proposal.

- 22. One Bid per Bidder.** - Conditional or alternative bids are not allowed. Bidders are required to quote one bid/one brand. If bidders quote, two bids/different brands then their bids are liable to be rejected. Bidder can quote only one offer in a tender, No-Option/Alternative offer will be considered. However, the alternative bids with separate bid security can be accepted.
- 23. COMSATS University Islamabad, Sahiwal Campus reserves the rights to reject the bid if;**
- i. Received without earnest money
 - ii. Received later than the date and time fixed for tender submission
 - iii. The tender is unsigned/ unstamped
 - iv. The offer is ambiguous
 - v. The offer is conditional
 - vi. Offer is made by the unauthorized agent/ supplier of the original equipment manufacturer
 - vii. The offer is from a firm, which is blacklisted by any Govt. Office.
 - viii. The offer is received by telephone/telex/fax/telegram.
 - ix. Any unsigned / ambiguous erasing, cutting / overwriting etc. are made.
- 24.** The Employer will inspect the supplied and provided items to verify their conformity to the Technical Specifications given in BoQ. The inspection will be conducted at the final destination.
- 25.** It is the sole responsibility of the agent / supplier / manufacturer to comply with the applicable laws, be national or international.
- 26.** Purchase order (s) will be awarded to the lowest or technically recommended bidder (s) on the basis of item wise / subtotal wise / grand total wise according to the nature of BoQs.
- 27. Rejection of bids.** - COMSATS University Islamabad, Sahiwal reserves all the rights to reject all bids or proposals at any time prior to the acceptance of a bid or proposals. CUI, Sahiwal Campus will communicate the grounds for rejection of bids upon request of any supplier or contractor but not liable to justify those grounds.
- 28.** Deduction of Income Tax and any other tax will be deducted at source according to Government prevailing rules.
- 29. Force Majeure.** - The Supplier shall not be liable for forfeiture of its Performance Security, liquidated damages, or termination for default if and to the extent that its delay in performance or other failures to perform its obligations under the Contract is the result of an event of Force Majeure.
- a) For purposes of this Clause, “Force Majeure” means an event or situation beyond the control of the Supplier that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Supplier. Such events may include, but not be

limited to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

- b) If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practicable and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

30. Extensions of Time. - If at any time after issuance of Purchase Order, the Supplier should encounter conditions impeding timely delivery of the Items pursuant to tender Clause 08, the Supplier shall promptly notify the Purchaser in writing of the delay, its likely duration, and its cause. As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may at its discretion extend the Supplier's time for delivery, in which case the extension shall be ratified by the parties by amendment of the Contract.

- a) Except in case of Force Majeure, as provided under Tender Clause 29, a delay by the Supplier in the performance of its Delivery and Completion obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to Tender Clause 31, unless an extension of time is agreed upon, pursuant to Tender Clause 30.

31. Liquidated Damages. If the vendor fails to deliver the goods / services to CUI-Sahiwal in time then the penalty will be charged as under:-

- a. 0.5% per day of the Purchase Order for the first 10 working days.
- b. 0.75% per day of the Purchase Order, after that, up to a maximum of 10% of the sum stated in the Purchase/Work Order. Once the maximum is reached, the Purchaser may terminate the contract pursuant to tender clause 35, earnest money and payment may be forfeited.

32. If the delivered goods / services are not according to the required quality standards / specifications, the same shall be liable to be rejected after inspection. The vendor would be required to supply as per requirements mentioned in our BoQs, otherwise, the purchase / work order will be cancelled after the due date with confiscation of earnest money.

33. On account payments. - Part / Advance payments in the case of option-1 in Pak Rupees are not allowed. Payment will be made on submission of Invoice in the name of "COMSATS University Islamabad, Sahiwal Campus" with a copy of delivery challan (s) after the complete order has been supplied, inspected and accepted which includes delivery / installation, and COMSATS acceptance / inspection thereof.

34. Blacklisting of Suppliers and Contractors. - A procuring agency can permanently or temporarily bar from participation in its respective procurement proceedings, the suppliers and contractors who either consistently failed to provide satisfactory performances or found to be indulging in corrupt or fraudulent practices.

35. Termination.

35.1 Termination for Default

(a) The Purchaser, without prejudice to any other remedy for breach of Contract, by Notice of default sent to the Supplier, may terminate the Contract in whole or in part:

(i) if the Supplier fails to deliver any or all of the Goods within the period specified in the Contract, or within any extension thereof granted by the Purchaser pursuant to Tender Clause 30; or

(ii) if the Supplier fails to perform any other obligation under the Contract.

(b) In the event the Purchaser terminates the Contract in whole or in part, pursuant to Tender Clause 35.1(a), the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Related Services similar to those undelivered or not performed, and the Supplier shall be liable to the Purchaser for any additional costs for such similar goods. However, the Supplier shall continue performance of the Contract to the extent not terminated.

(c) if the Supplier, in the judgment of the Purchaser, has engaged in corrupt and fraudulent practices, in competing for or in executing the Contract.

35.2 Termination for Insolvency

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

35.3 Termination for Convenience

The Purchaser, by 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 Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.

The Goods that are complete and ready for shipment within twenty-eight (28) days after the Supplier's receipt of the Notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect:

- (i) To have any portion completed and delivered at the Contract terms and prices; and/or
- (ii) To cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and for materials and parts previously procured by the Supplier.

- 36.** In case of any grievances, the matter will be redressed as per PPRA Rules.
- 37.** The contract will be executed and handed over in satisfactory conditions up to the entire satisfaction of COMSATS University Islamabad, Sahiwal Campus.
- 38.** The quantities given in the Bill of Quantities are estimated and provisional and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work executed and measured by the Bidder and verified by the Department/Concerned Office and valued at the rates and prices entered in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Employer may fix as per the Contract.
- 39.** The CUI, Sahiwal Campus reserves the right to modify the quantities of goods / services at any time before the award of purchase / work order.
- 40.** In the case of repeat orders, fifteen percent (**15%**) of the Original Procurement within the bid validity period will be considered as the permissible limit to issue variation.
- 41.** The bidder should furnish a certificate as worded below in token of acceptance of all the terms and conditions of the tender. Otherwise, the tender will not be considered under any circumstances.

42. I / We hereby confirm to have read carefully the terms and conditions of your Tender Enquiry dated for opening on..... for the purchase of

We agree to abide by all these terms and conditions/instructions.

43. Certified that the prices quoted by our firm are inclusive of G.S.T and all taxes as per rules and regulations.

Company / Vendor Name:.....

Name of Vendor...:.....

Postal Address:.....

Tel. / Mobile:.....**Email:**.....

NTN#:.....**GST#:**.....

C.N.I.C No:.....

Signature of the Vendor

Date and Stamp:.....

- Please also attach the Certificate supporting being an Active Taxpayer as per the requirement of FBR.

Bill of Quantities (BoQ)

Procurement of Equipment for Concrete, Water Supply, Highway and Mechanics of Solids Labs, Civil Engineering Department, CUI Sahiwal Campus”.

Option-I-Unit Cost in Pak Rupees with freight, packing, delivery, installation, training with all applicable taxes.

Option-II-Unit Cost in CFR with all freight, packing charges and to be delivered at Karachi Sea Port and then delivery to Sahiwal including installation and training charges.

Concrete Engineering Laboratory Equipment (with equivalent OR higher specifications)

Sr.N.	Item Name	Specification	Unit	Qty	Financial Proposal Quoted by the Vendor			
					Model/ Make	Currency	Unit Price	Total Price
01	Mortar Cubic Molds (Cast Iron)	Size: 50x50x50mm	Set	10 Sets (3gangs)				
02	Mortar Prismatic Molds (Cast Iron)	40x40x160mm 70.7x70.7x2845mm	Set	10 Sets each (3gangs)				
03	Concrete Beam Molds (Cast Iron)	Size: 100x100x350mm Size: 100x100x500mm	Pcs	10 pieces each				
04	Jig for Split Tensile Strength Test	Capable of holding cylindrical specimens of $\phi 4'' \times 8''$ and $\phi 6'' \times 12''$ and $\phi 160 \times 320$ mm with bearing strips for performing split tensile strength test	No	2 Nos.				

Signature & Stamp of Bidder

05	Digital Thermostat	The ability to heat 1000L capacity concrete curing tank and maintain the temperature. Temperature range: 0 to 80°C adjustable. Complete with depth stainless steel probe and adjustable.	No	3 Nos.				
06	ASTM Sieve Set	12" diameter sieve set with certificate, confirming to ASTM E11. ASTM No: 2", 1", 3/4", 1/2" and 3/8" + lid and receiver.	Set	2 Sets				
07	Sieve Shaker, Motor Operated	It accepts sieves having diameter 200mm, 250mm, 300mm, 315 mm, and 8", 12". Sieve shaker is activated by an electric motor and can hold up to 8 sieves diameter 200 mm or 7 sieves diameter 300 mm plus pan and lid. It is also possible to perform wet sieving tests. Provided of timer 0-60 minutes. Power supply: 220-240V, 1ph, 50-60Hz.	No	1				
08	Concrete Specimen Cutter	Used to cut concrete specimens and any type of construction material like blocks, tiles, pipes, rock cores etc. Comes with 10 concrete/metal cutting blades/discs. Safety device for breakage of blade. Maximum rotation speed: 3000-5000rpm controllable. Power Supply: 220-240V, 3kw, 1-2ph, 50-60Hz 1ph.	No	1				

09	Drying Shrinkage Determination Apparatus	Confirming to ASTM/EN standards. Used to measure the length changes due to shrinkage of mortar and concrete prisms. Digital gauge indicator with readings in mm (12.7x0.001mm). Comes with Reference rod, supporting 3-gang prismatic molds (5 sets) and other accessories.	No	1				
10	Muffle Furnace	Temperature Range: 1000°C. Internal Chamber Size 250*400*150mm Volume 15 liter.	No	1				
<u>Water Supply Engineering Lab Equipment (with equivalent OR higher specifications)</u>								
11	Glass Cylinders i. 1000 mL ii. 500 mL iii. 250 mL iv. 100 mL v. 50 mL vi. 25mL		No	10 each				
12	Auto titration device	Auto-titration device with all working accessories, beakers etc.	No	2				
13	Electric Conductivity Meter with probe	Electric Conductivity Meter with all accessories and material for detecting conductivity of water sample.	No	5				

14	BOD Apparatus with all working accessories	<p>BOD Apparatus with internal stainless-steel chamber of 2.4 cft capacity.</p> <p>Temperature range 2°C to 40°C, 68 Liters.</p> <p>Backlit LED display, Microprocessor P.I.D controller, On/Off compressor control PT 100 sensor, solid insulated doors, stainless steel shelves (removable), refrigerant R134a (CFC free), operate on 220 Volts.</p> <p>Features:</p> <ul style="list-style-type: none"> • Microprocessor Control System • Safety thermostat for over temperature protection • CFC free cooling systems (branded) • Designed with and without orbital shaker • Fully Adjustable Shelves • Double walled construction with insulation • PID temperature controller meet APHA specifications Biochemical Oxygen Demand • Printer interface • Complete IQ, OQ and PQ documentation • Caster wheels for easy mobility • Audio visual alarm alerts • Caster wheels 	No	1				
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		<p>Accessories:</p> <p>Humidity system</p> <p>Light system by interior illumination w/3 fluorescent tubes.</p> <p>Timer 0-24 hours for regulating cycle's illumination condition,</p> <p>Arrangement for incubation of CO₂, Air Mixture,</p> <p>Combined Electronic Digital Temperature & humidity controller.</p> <p>Automatic Voltage Stabilizer of 3KVA and Certifications (IQ / OQ / DQ / PQ)</p>						
15	<p>Conical Flasks with stoppers</p> <p>i. 1000mL</p> <p>ii. 500mL</p> <p>iii. 250mL</p> <p>iv. 100 mL</p> <p>v. 50 mL</p> <p>vi. 25mL</p>		No	10 each				
16	<p>Volumetric Flasks stoppers</p> <p>i. 1000 mL</p> <p>ii. 500 mL</p> <p>iii. 250 mL</p> <p>iv. 100mL</p> <p>v. 50mL</p> <p>vi. 25mL</p>		No	10 each				

17	Test Tube 16X50mm Borosilicate Glass		No	10				
18	Test tube Stand 12 Hole SS		No	10				
19	Glass Funnel Dia. 100 mm (Borosilicate Glass)		No	10				
20	BOD Bottle	Capacity of 300 ml with Ground Glass Stopper.	No	10				
21	COD Apparatus	Comes with complete set of working accessories/solutions etc. for all types of tests. Programmable auto-start. Microprocessor built-in the case. Nine user free programs. Each program has eighteen (18) different temperature / incubation time segments. Heating block is made of aluminum. Housing made for digestion tubes (C.O.D.). Heat insulation with ceramic fiber and a double air chamber. Circuit protection against corrosive agents. Places: 6. Temperature range: 450°C. Power: 500 W. 220-240V, 50-60Hz Supplied complete with test tube rack with support, support for cooling tubes.	No	1				

		Set of vials, tubes for C.O.D. with conical inlet 29/32 and 1 Set of cooling tubes for air with conical inlet 29/32.						
22	Glass Burette 50 mL Stopcock Blue Line Mbl Pyrex		No	10				
23	Burette Stand W.O Clump Base & Rod Only		No	10				
24	Plastic Clump for Burette Stand		No	10				
25	Pipette, Graduated i. 25 ML ii. 10 ML iii. 5 mL		No	10 each				
26	Pipette Filler Rubber		No	10 each				
27	Pipette Pump/Sucker Screw		No	10 each				

Highway Engineering Lab Equipment (with equivalent OR higher specifications)							
28	<u>Los Angeles Abrasion Machine</u>	<p>Confirming to ASTM/EN standards. It comprises a heavy steel cylinder of 711 mm inside diameter x 508 mm inside length, mounted on a base frame. The cylinder rotates at 31-33 rpm.</p> <p>The machine is fitted with an automatic digital counter which can be preset to the required number of revolutions of the drum. The cylinder is counter-balanced so that the filling opening stays in position without tilting; a push-button allows to position such opening for the loading/unloading operations.</p> <p>Security cabinet, manufactured from sheet steel, internally lined with sound-proofing material for noise reduction conforming to CE safety directive, when opening the cabinet's door during Los Angeles working, a micro-switch automatically stops the rotation of the drum. Power supply: 230 V, 50 Hz, 1ph. Comes complete with set of 12 abrasive charges. <u>A separate sound proof cabinet.</u></p>	No	1			

29	Relative Density Apparatus with hoist	<p>The equipment is applicable for the determination of the relative density of cohesionless soil. Confirming to ASTM standards</p> <p>Relative density mould 0.5 and 0.1 cu.ft. capacity with accessories.</p> <p>Surcharge weight and base with handle to ASTM for the 0.5 and 0.1 cu.ft. mould. Relative density gauge measuring jet.</p> <p>Apparatus: Vibrating Electro-magnetic Table.</p> <p>Power Supply: 230V 1ph 50-60Hz.</p>	No	1				
30	Core Drilling Machine, upto ϕ 150mm coring range	<p>This rugged, compact and portable machine with vertical and horizontal screw feed is used for concrete and pavement core sampling.</p> <p>Supplied with coring bits (3", 4" and 6", each 5Nos.).</p> <p>Core catchers for same sized bits (each 5 Nos.) for 400mm length specimens.</p> <p>Supplied electric power and supported by a 4-stroke Briggs and Stratton model generator.</p>	No	<p>1</p> <p>5 Nos. each</p> <p>5 Nos. each</p>				

31	Flakiness and Elongation gauges	Complete set of gauges (10Nos. each). Stainless steel	Set	10 sets each				
32	Water bath with cooler unit	65Liters capacity, PID digital controlled system, circulation unit, Temp. range 5 to 70C. Stainless steel interior, fully insulated, 220-240V, 50-60Hz, 1ph.	No	1				
33	Specific Gravity Apparatus	Used for determination of specific gravity of fresh and hardened concrete and aggregates. It consists of Buoyancy Balance 20kg*0.1g, Specific gravity frame, Density Tank/Basket 230x260mm deep, 4 No. mesh, Stainless steel 8” dia.x8” height cradel.	No	1				
34	GMM Apparatus	Comprises of Vacuum pycnometer, 10 Liter capacity supplied with vacuum gauge, vacuum pump electric, 2stage, 6cfm Vibrodeareator, timer controlled, used for evacuation of air by vibration at vacuum pycnometer. 220-240V, 50-60Hz, 1ph.	No	1				
35	Skid Resistance Tester / Fraction Coefficient	Designed for laboratory and in situ road surface testing. Low friction arm, and lightweight pointer Supplied with robust carrying case	No	1				

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36	Asphalt Centrifuge Extractor with all accessories	Digital Centrifuge Extractor, 220- 240V, 50Hz, 1ph. 3kg capacity, speed adjustable, 3600 rpm, Comes with filter papers and Tri- chloroethylene solvent	No	1				
<u>Mechanics of Solids Lab Equipment (with equivalent OR higher specifications)</u>								
37	Universal Structural Frame with all accessories	Basic bench top type twin rectangular frame of 30 x 60 mm aluminum profile with adjustable footings. Dimensions: 450x970x930 mm. Twin member space: 30 mm. Window opening: 850x550 mm. Maximum load capacity: 2.5 kN.	No	1				
Grand Total Amount with Currency Code								
Amount in Words								
Tender Document Fee Non-Refundable (Rs. 1,000)-Bank Name, Demand Draft # and Date								
Call Deposit Receipt (CDR)-Refundable- Bank Name, CDR #, Amount and Date.								

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Note:

- The Purchase/Work order will be awarded on the **Item Wise Basis.**
- Please clearly mention the quoted model/brand/technical detail otherwise your bid /items may be rejected.
- For all the Brands mentioned in this tender (if any), the term “equivalent or higher” is hereby added and shall be considered as per PPRA rules.
- Multiple prices of an item may lead to rejection of the item/bid.
- Interested vendors are strongly recommended to visit the Department of Civil Engineering, CUI Sahiwal Campus during office hours from 8:30 am to 4:30 pm from Monday to Friday to clear any point regarding specifications.
- Conditional proposals are not allowed.
- Civil Works if required and consumables for training purpose will be the responsibility of the University.
- The University can ask the vendor to support in custom clearance at Karachi Seaport.
- Complete Support for after sales services.

Technical Proposal

Procurement of Equipment for Concrete, Water Supply, Highway and Mechanics of Solids Labs, Civil Engineering Department, CUI Sahiwal Campus”.

Option-I-Unit Cost in Pak Rupees with freight, packing, delivery, installation, training with all applicable taxes.

Option-II-Unit Cost in CFR with all freight, packing charges and to be delivered at Karachi Sea Port and then delivery to Sahiwal including installation and training charges.

Concrete Engineering Laboratory Equipment (with equivalent OR higher specifications)

Sr.N.	Item Name	Specification	Unit	Qty	Technical Proposal Quoted by the Vendor		
					Model/ Make	Currency	Quoted Specifications
01	Mortar Cubic Molds (Cast Iron)	Size: 50x50x50mm	Set	10 Sets (3gangs)			
02	Mortar Prismatic Molds (Cast Iron)	40x40x160mm 70.7x70.7x2845mm	Set	10 Sets each (3gangs)			
03	Concrete Beam Molds (Cast Iron)	Size: 100x100x350mm Size: 100x100x500mm	Pcs	10 pieces each			

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04	Jig for Split Tensile Strength Test	Capable of holding cylindrical specimens of $\phi 4'' \times 8''$ and $\phi 6'' \times 12''$ and $\phi 160 \times 320$ mm with bearing strips for performing split tensile strength test	No	2 Nos.			
05	Digital Thermostat	The ability to heat 1000L capacity concrete curing tank and maintain the temperature. Temperature range: 0 to 80°C adjustable. Complete with depth stainless steel probe and adjustable.	No	3 Nos.			
06	ASTM Sieve Set	12" diameter sieve set with certificate, confirming to ASTM E11. ASTM No: 2", 1", 3/4", 1/2" and 3/8" + lid and receiver.	Set	2 Sets			
07	Sieve Shaker, Motor Operated	It accepts sieves having diameter 200mm, 250mm, 300mm, 315 mm, and 8", 12". Sieve shaker is activated by an electric motor and can hold up to 8 sieves diameter 200 mm or 7 sieves diameter 300 mm plus pan and lid. It is also possible to perform wet sieving tests. Provided of timer 0-60 minutes. Power supply: 220-240V, 1ph, 50-60Hz.	No	1			

08	Concrete Specimen Cutter	Used to cut concrete specimens and any type of construction material like blocks, tiles, pipes, rock cores etc. Comes with 10 concrete/metal cutting blades/discs. Safety device for breakage of blade. Maximum rotation speed: 3000-5000rpm controllable. Power Supply: 220-240V, 3kw, 1-2ph, 50-60Hz 1ph.	No	1			
09	Drying Shrinkage Determination Apparatus	Confirming to ASTM/EN standards. Used to measure the length changes due to shrinkage of mortar and concrete prisms. Digital gauge indicator with readings in mm (12.7x0.001mm). Comes with Reference rod, supporting 3-gang prismatic molds (5 sets) and other accessories.	No	1			
10	Muffle Furnace	Temperature Range: 1000°C. Internal Chamber Size 250*400*150mm Volume 15 liter.	No	1			

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<u>Water Supply Engineering Lab Equipment (with equivalent OR higher specifications)</u>							
11	Glass Cylinders vii. 1000 mL viii. 500 mL ix. 250 mL x. 100 mL xi. 50 mL xii. 25mL		No	10 each			
12	Auto titration device	Auto-titration device with all working accessories, beakers etc.	No	2			
13	Electric Conductivity Meter with probe	Electric Conductivity Meter with all accessories and material for detecting conductivity of water sample.	No	5			
14	BOD Apparatus with all working accessories	BOD Apparatus with internal stainless-steel chamber of 2.4 cft capacity. Temperature range 2°C to 40°C, 68 Liters. Backlit LED display, Microprocessor P.I.D controller, On/Off compressor control PT 100 sensor, solid insulated doors, stainless steel shelves	No	1			

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		<p>(removable), refrigerant R134a (CFC free), operate on 220 Volts. Features:</p> <ul style="list-style-type: none">• Microprocessor Control System• Safety thermostat for over temperature protection• CFC free cooling systems (branded)• Designed with and without orbital shaker• Fully Adjustable Shelves• Double walled construction with insulation• PID temperature controller meet APHA specifications• Biochemical Oxygen Demand• Printer interface• Complete IQ, OQ and PQ documentation• Caster wheels for easy mobility• Audio visual alarm alerts• Caster wheels <p>Accessories:</p> <p>Humidity system Light system by interior illumination w/3 fluorescent tubes. Timer 0-24 hours for regulating cycle's illumination condition, Arrangement for incubation of CO2, Air Mixture,</p>				
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		Combined Electronic Digital Temperature & humidity controller. Automatic Voltage Stabilizer of 3KVA and Certifications (IQ / OQ / DQ / PQ)					
15	Conical Flasks with stoppers vii. 1000mL viii. 500mL ix. 250mL x. 100 mL xi. 50 mL xii. 25mL		No	10 each			
16	Volumetric Flasks stoppers vii. 1000 mL viii. 500 mL ix. 250 mL x. 100mL xi. 50mL xii. 25mL		No	10 each			

17	Test Tube 16X50mm Borosilicate Glass		No	10			
18	Test tube Stand 12 Hole SS		No	10			
19	Glass Funnel Dia. 100 mm (Borosilicate Glass)		No	10			
20	BOD Bottle	Capacity of 300 ml with Ground Glass Stopper.	No	10			
21	COD Apparatus	Comes with complete set of working accessories/solutions etc. for all types of tests. Programmable auto-start. Microprocessor built-in the case. Nine user free programs. Each program has eighteen (18) different temperature / incubation time segments. Heating block is made of aluminum. Housing made for digestion tubes (C.O.D.). Heat insulation with ceramic fiber and a double air chamber. Circuit protection against corrosive agents.	No	1			

		Places: 6. Temperature range: 450°C. Power: 500 W. 220-240V, 50-60Hz Supplied complete with test tube rack with support, support for cooling tubes. Set of vials, tubes for C.O.D. with conical inlet 29/32 and 1 Set of cooling tubes for air with conical inlet 29/32.					
22	Glass Burette 50 mL Stopcock Blue Line Mbl Pyrex		No	10			
23	Burette Stand W.O Clump Base & Rod Only		No	10			
24	Plastic Clump for Burette Stand		No	10			
25	Pipette, Graduated iv. 25 MI v. 10 MI vi. 5 mL		No	10 each			
26	Pipette Filler Rubber		No	10 each			
27	Pipette Pump/Sucker Screw		No	10 each			

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Highway Engineering Lab Equipment (with equivalent OR higher specifications)						
28	<u>Los Angeles Abrasion Machine</u>	<p>Confirming to ASTM/EN standards. It comprises a heavy steel cylinder of 711 mm inside diameter x 508 mm inside length, mounted on a base frame. The cylinder rotates at 31-33 rpm.</p> <p>The machine is fitted with an automatic digital counter which can be preset to the required number of revolutions of the drum. The cylinder is counter-balanced so that the filling opening stays in position without tilting; a push-button allows to position such opening for the loading/unloading operations.</p> <p>Security cabinet, manufactured from sheet steel, internally lined with sound-proofing material for noise reduction conforming to CE safety directive, when opening the cabinet's door during Los Angeles working, a micro-switch automatically stops the rotation of the drum. Power supply: 230 V, 50 Hz, 1ph. Comes complete with set of 12 abrasive charges.</p> <p><u>A separate sound proof cabinet.</u></p>	No	1		

29	Relative Density Apparatus with hoist	<p>The equipment is applicable for the determination of the relative density of cohesionless soil. Confirming to ASTM standards</p> <p>Relative density mould 0.5 and 0.1 cu.ft. capacity with accessories.</p> <p>Surcharge weight and base with handle to ASTM for the 0.5 and 0.1 cu.ft. mould. Relative density gauge measuring jet.</p> <p>Apparatus: Vibrating Electro-magnetic Table.</p> <p>Power Supply: 230V 1ph 50-60Hz.</p>	No	1			
30	Core Drilling Machine, upto ϕ 150mm coring range	<p>This rugged, compact and portable machine with vertical and horizontal screw feed is used for concrete and pavement core sampling.</p> <p>Supplied with coring bits (3", 4" and 6", each 5Nos.).</p> <p>Core catchers for same sized bits (each 5 Nos.) for 400mm length specimens.</p> <p>Supplied electric power and supported by a 4-stroke Briggs and Stratton model generator.</p>	No	<p>1</p> <p>5 Nos. each</p> <p>5 Nos. each</p>			

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Sheet for Evaluation of Technical Proposals of the Vendors

Srl.No	Evaluation Criteria	Provided
01	Literature of Quoted Brand in hard/colored form (Catalogue with Pictures)	
02	<u>Copy of the Valid Authorization Certificate with Sign and Stamp</u> Original Equipment Manufacturers/Authorized distributors of the quoted brand. Certificate from the Principal/Manufacturer.	
03	Warranty Coverage Certificate	
04	<u>Undertaking about equipment</u> Guarantee that the Machine is genuine, brand new and non-refurbished	
05	Customized Company Profile: Valid NTN & GST Numbers, Proof of Name in Active Taxpayer List, Detail of Technical Staff and Facilities including Equipment and Labs, Detail of Head Office, Sub-Offices with complete detail. <u>Audit Reports of last two years.</u>	
06	<u>Photocopies of Purchase Orders for supply of equipment</u> Photocopies of Purchase Orders for Supply of equipment in <u>last Two Years.</u>	
07	<u>Affidavit on stamp paper of Rs.50</u> Affidavit on Judicial Stamp Paper (For Not Blacklisting)	
08	Original Tender Documents with sign and stamp and acceptance of all tender terms and conditions on company letterhead with the technical proposal.	