TENDER NOTICE

INTERNATIONAL ISLAMIC UNIVERSITY ISLAMABAD (IIUI) invites sealed bids from the *original manufacturers* / *authorized distributors* (*with valid authorization / distribution certificate*) / *suppliers* registered with Income Tax and Sales Tax Departments and who are on Active Taxpayers List of the Federal Board of Revenue for supply of "Lab Equipment for Department of Civil Engineering (DCE) FET, IIU.

2. Bidding documents, containing detailed terms and conditions, etc. are available at Room No. 213, 2nd Floor, Administration Block, Sector H-10, New Campus International Islamic University, Islamabad. Bidding documents can also be downloaded from <u>www.iiu.edu.pk</u> and <u>www.ppra.org.pk</u>. Price of the bidding documents is **Rs. 1,000/-** (*Non-refundable dollable dollable dollable)* in shape of Pay Order/Call Deposit/Bank Draft in favour of IIUI

3. The bids, prepared in accordance with the instructions in the bidding documents, must reach on or before <u>06-11-2018 up-till 10:30 a.m</u> at Room No. 213, 2nd Floor, Administration Block, Sector H-10, New Campus IIUI. Bids will be opened on the same day i.e 06-11-2018 at 11:00 a.m in the presence of the bidders/their representatives who may like to attend the opening ceremony.

4. International Islamic University Islamabad reserves the right to accept or reject any/all bid(s) in terms of Section-33 of Public Procurement Rules 2004.

Javaid Rabbani, Deputy Director(P&S) Ph:9019255

INTERNATIONAL ISLAMIC UNIVERSITY ISLAMABAD

Purchase & Store Section, Admin Block, New Campus, Sector H-10, Islamabad. Tel: 051-9019255 Fax: 051-9258073

Tender No. IIUI-_____

Sub: <u>TENDER DOCUMENT FOR PURCHASE OF LAB EQUIPMENT FOR "DEPARTMENT OF CIVIL ENGINEERING (DCE)", FET</u> <u>"TERMS AND CONDITIONS</u>"

[All pages (BoQs & Terms & Conditions) are mandatory to be signed / stamped, failing which the bid may lead to rejection]

- 1. Any addition, deletion or modification of any clause of the procurement terms & conditions of International Islamic University Islamabad (IIUI) by any vendor will not be acceptable and may lead to rejection of the bid.
- 2. Original Manufacturer / Authorized Distributors (*with valid authorization / distribution certificate*) / Suppliers registered with Income Tax, Sales Tax Department and who are on Active Taxpayers List (ATL) of FBR, are eligible to participate in tender.
- 3. Documents along with Pay Order / Demand Draft / Cash Receipt issued by Finance Department of IIUI amounting to <u>Rs. 1,000/-</u> as a tender document fee (Non-Refundable) shall be submitted in favor of International Islamic University, Islamabad, to the address given below. *(See No. 13)*
- 4. The exact completion/delivery time from the date of the purchase / work order will be <u>120 days</u>. The handing over / completion time is of critical importance.
- 5. The bid proposal(s) should be inclusive of:
 - i. All FREIGHT and PACKAGING CHARGES (Items deliverable at Islamabad Airport/Dry Port on "CPT/CFR Basis as per BoQs Format)
 - ii. All Taxes, if prices are quoted on "FOR Basis" as per BoQs Format (Items deliverable (Free of Cost) to International Islamic University, New Campus, Sector H-10 Islamabad)

6. The Payment Terms will be:

- For the CPT/CFR quoted items; payment will be made through irrevocable L.C (90:10 Model) in favor of Manufacturer/supplier. Where, 90% under the said model will be released upon receipt of shipment and delivery documents. Remaining 10% will be made / released after successful inspection of the equipment at International Islamic University Islamabad.
- ii. For the FOR quoted items; 100% payment will be made after supply and successful inspection of the ordered equipment(s).
- 7. For the CPT/CFR quoted items; shipment(s) will be cleared by the International Islamic University, Islamabad from Custom Authorities.

- 8. After opening of bids, International Islamic University Islamabad will examine the bids for completeness as per tender document's Terms & Conditions AND Technical Specifications, (As per BoQ)
- 9. Purchase order (s) will be awarded to the lowest evaluated OR technically recommended bidder (s) on the basis of item wise / subtotal wise / grand total wise according to the nature of BoQs/Compatibility requirements.
- 10. Procedure of open competitive bidding shall be: Single Stage One Envelope procedure
- 11. Bidders cannot challenge the finding(s) of the Evaluation Committee or ask for reason of disqualification.

12. The bid should be submitted in a sealed envelope up to the specified deadlines for the items for "**Department of Civil Engineering (DCE)**" (i-e **November 06, 2018**) on or before 10:30 A.M and will be opened on the same date at 11:00 A.M in the presence of available bidders or their representatives who may like to attend the bid opening

13. The envelope should be marked as under;

Mr. Javaid Rabbani Dy. Director (P&S) Room No. 213, 2nd Floor, Admin Block, New Campus, Sector H-10 International Islamic University Islamabad. Tel: 051-9019255

- 14. The envelope shall also bear the word "CONFIDENTIAL" and following identification quotation for:" Department of Civil Engineering (DCE)" FET
- 15. The bid form (BoQs) must be duly filled in, stamped and signed by the authorized representative of the bidder.
- 16. If the vendor fails to deliver the goods / services to International Islamic University, Islamabad in time then the penalty will be charged as under:
 - a. 02% per month of the total Purchase Order value;
 - b. If the vendor fails to deliver the goods / services during the extended period (*if allowed*) then the purchase / work order may be cancelled and Earnest money may be forfeited.
- 17. 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 bidder/vendor will be required to REPLACE as per requirements mentioned in our BoQs at no cost to the IIUI, otherwise the purchase / work order will be cancelled after due date with confiscation of earnest money AND bidder will bear all cost and expenses thereof.
- 18. All prices should be quoted on both CPT/CFR Islamabad Basis and FOR (IIUI) Basis.
- 19. All prices should be valid for at least <u>120 days</u>. Withdrawal or any modification of the original offer within the validity period shall entitle IIUI to forfeit the earnest money in favor of the IIUI and / or put a ban on such vendor for participation in IIUI tenders / works.
- 20. It is the sole responsibility of the agent / supplier / manufacturer / vendor to comply with the applicable laws, be national or international.
- 21. In case of any dispute, decision of the President, IIUI will be final and binding upon the parties.
- 22. The IIUI reserves the right to modify the quantities of goods / services at any time before the award of purchase / work order.

23. Earnest Money:

The bidder is required to furnish in form of "CDR" equivalent to **2%** of the total Bid price (in PKR) as Earnest Money in favor of "International Islamic University Islamabad". Any bid not accompanied by the Earnest Money shall be rejected without any right of appeal.

24. Retention Money:

An amount equal to 10% (in PKR) of the total value of the Purchase Order/Contract Price shall be retained by the International Islamic University, Islamabad for the Warranty Period (Refer to Clause 4 of Special Conditions) as follows:

• The successful bidder(s) for the CPT/CFR items shall have to be required to submit a "CDR" equal to 10% of the total value of Purchase Order from a Scheduled Bank of Pakistan within 10 days after supply of ordered item(s) for the warranty period.

• 10% of the total value of the Purchase Order will be withheld by the IIUI from the payment of successful bidders, on FOR Basis supplied items, for the warranty period.

25. The bidder is also required to furnish Company Profile, Client List and Detail of similar Projects/Works along with the proposal.

26. International Islamic University Islamabad reserves the rights to accept or reject the bid/s, if;

- Received later than the date and time fixed for tender submission.
- The tender is unsigned/ unstamped.
- The offer is ambiguous.
- The offer is conditional.
- Offer is made by the unauthorized agent/ supplier of the original equipment manufacturer.
- The offer is from a firm, which is black listed by any Govt. Office.
- The offer is received by telephone/telex/fax/telegram.
- Any unsigned / ambiguous erasing, cutting / overwriting etc. is made.
- Received without Company Profile, Client List and **Detail of similar Projects/Works with evidence**.
- Without Guarantee / Warrantee of the quoted equipment(s). (*Minimum <u>twelve (12) months</u> after the Goods, or any portion thereof as the case may be, have been delivered to and accepted*
- 27. The bidder should furnish a **CERTIFICATE** on judicial STAMP PAPER worth Rs. 100 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. I / We
 - Company / Vendor Name:______
 - Postal Address:
 - Tel. No: ______ Mob No. _____
 NTN# : _____ GST#: _____

The undersigned certify that the terms and conditions as contained in this document, viz "*Terms and Conditions*" are accepted unconditionally and in the event of selection of my/our bid/s; the agreement will be entered into, in the prescribed format attached as **Annex-I**. The Special Conditions that are attached as part of proposed agreement at **Annex-II** are also accepted unconditionally.

Sign & Stamp

1. Please quote the rates on our BoQs and clearly mention the quoted Make / Model / Country of Origin, otherwise your bid / items may lead to rejection.

Note:

- 2. PRICES quoted in different currencies on CPT/CFR basis will be evaluated after converting them into PKR (local currency) at the <u>EXCHANGE RATE</u> prevailing at the State Bank of Pakistan / Open Market on the date of Opening of Bid(s)
- 3. In Addition to filling of the attached BoQs, supporting literature of the quoted model must be attached for verification & technical evaluation of the required specification by the bid evaluation committee. In case of any clash found between the quoted model and the literature model, the item/bid may be rejected.
- 4. Terms & Conditions and BoQs should be attached with the proposal (Technical & Financial Bids), otherwise your tender/bid(s) may lead to rejection.
- 5. Please also attach the Certificate supporting being Active Taxpayer as per requirement of FBR.

BoQs for the Supply of Lab Equipment for "Department of Civil Engineering (DCE)"

S. No E			ions Qty. Make/Model (Qty. Country of Origin Unit	CPT/CF (Islamab	R Price ad Basis)	FOR Pric	e (at IIUI)	
	Equipment Name	BoQs/Specifications		Unit Price	Total Price	Unit Price	Total Price	
1	TORSION TESTING APPARATUS	 Torsion Testing apparatus Use to measure the modulus of rigidity (shear modulus) of a mild steel or castiron specimen. Specifications: Capacity ranges between 30 Nm to 50 Nm. Bench mounted machine, forward and reverse loading arrangement. Digital display of torque and strain readings. Rigid frame supported at ends by adjustable feet. Maximum length of specimen 850mm. Machine consist of a manually operated reduction gearbox mounted on a platform at one end and torque reaction & measurement arrangement at the other end. The platform shall be moveable along the frame. Free movement for output shaft of gearbox to adjust different lengths of sample. Digital force display system. Hexagonal drive sockets to hold the specimen between the output shaft of gearbox and the torsion shaft. Safety glass to protect users. Reduction ratio of gearbox ranges 50:1 to 650:1. Wide range of test specimens consists of various metals Computer software provides real-time data and graph of readings for various specimens. 	01					

		(Country of origin : USA, UK,JAPAN, EUOROPE, CHINA Or any other country)				
2	IMPACT TEST APPARATUS	 Impact test Apparatus This machine is used to familiarize the students with different impact test methods such as Charpy and Izod test. It is also used to measure the resistance of materials to crack propagation. Specifications: Capacity ranges between 50 Joules to 150J A simple bench-mounted machine consists of a core unit, instrumentation unit and a power supply. The core unit consists of a pendulum supported by bearings, the angular position of a pendulum over its entire movement measuring system. Base with adjustable feet. For safety apparatus must be enclosed with interlocked guard to cover all the moving parts Digital display system for energy absorbed and angular position before and after impact. Wide range of specimens. 	1			
3	ROCKWELL HARDNESS APPARATUS	 Rockwell hardness Apparatus To determine the hardness of a given specimen. (Local / Pakistani Made) Specifications: The machine which can perform Rockwell hardness test in accordance with standards of BS EN ISO 6508:2015 and ASTM E18 	1			

		 Diamond cone indenter and a standard 1/16" diameter ball indenter. Four-digit LED display system. Instruction manual 				
4	FATIGUE TEST APPARATUS	 Fatigue test apparatus This machine is used to measure the fatigue properties of different materials and also to understand the use and creation of Wohler curves for various materials. Specifications: Bench-mounting machine used to study the effect of fatigue on a circular cantilever specimen with load applied at its free end. Specimen is attached to the one end of the rotating shaft. Specimen with special design to create maximum stress at mid- point rather than at its ends. Digital display system shows the load, speed (cycle rate) and the number of cycles. A stopping switch provided to the drive motor to stop the motor when specimen fails. A removable clear guard covers the rotating parts for safety with an interlink switch to stop the motor when guard removed Motor with capacity ranges 0.30- 0.40 kW and 2500-3000 rpm (Approx.). Revolution counter: 8 digits Power Supply: 220v. 	1			
5	UNSYMMETRICAL CANTILEVER APPARATUS	 Unsymmetrical cantilever apparatus It is used to determine the unsymmetrical bending of a cantilever, and also to locate the shear center of the section. Specifications: > Bench mounted machine with adjustable feet's > Specimen fixed to a holding ring which can rotate through 360 degrees > Cantilever section of aluminum and 400mm to 700mm long. 	1			

		Contilover costions are angle	
		section, channel and rectangular	
		sections.	
		Weight hanger with set of weights	
		to apply load	
		Digital indicators to measure the	
		deflection in two directions at	
		right angle to each other.	
		\succ Loading arrangement to apply	
		load at different position across	
		and outside the cantilever section	
		the final the charge contained the test	
		to find the shear center of the test	
		beam.	
		Set of different specimens.	
		Instruction manual for	
		experiments	
		Country of Origin: LISA LIK LADAN	
		(Country of Origin: 03A, 0K,JAPAN,	
		EUOROPE, CHINA Or any other country)	
		Thin cylinder apparatus	
		The apparatus used for analyses of stresses	
		and strains in a thin walled cylinder under	
		internal pressure. It is also used to	
		determine the young's modulus and	
		Deissen's retia. Cleased and anenged	
		Poisson's ratio. Closed-end and opened-	
		end conditions to allow circumferential or	
		biaxial stress test. (Local / Pakistani Made)	
		Specifications:	
		Bench mounted machine, consists	
		of a thin walled aluminum	
	АТ		
~	AR	cylinder neid in a frame.	
6	d	Internal pressure is applied to the	
	A	cylinder by means of a hydraulic	
	ER	hand pump with oil inside the 1	
	DN ND	cvlinder.	
		Pressure gauge and electronic	
	0	sonsor indicated the hydraulic	
	Z	sensor indicated the hydraulic	
	臣	pressure.	
		Strain gauges to measure strains	
		attached on the cylinder surface.	
		Hand-wheel on the frame to set	
		up open end and closed end	
		conditions	
		Culinder length 250mm to	
		400mm, and outer diameter	
		60mm to 100mm.	
		Supplied with user guide manual.	

7 Status used for analyses of stresses and strains in a thick-walled cylinder under internal pressure. It is also used to measure the longitudinal stress and strain at the outer surface. Circumferential stress and strains at the inner and outer surface of the cylinder. (Local / Paktstani Made) Specifications:			Thick cylinder annaratus				
7 Image: Second Sec			The apparatus used for analyses of stresses				
8 Note of a thick walled aluminum control with a strain at the innor and outer surface. Circumferential stress and strain at the innor and outer surface of the cylinder. (Local / Pakistani Made) Specifications: > Ench mounted machine, consists of a thick walled aluminum cylinderheld in a frame. > The cylinder is in two halves commented together > The cylinder is in two halves commented together > The cylinder is in two halves commented together > The cylinders. > Cylinders contains oil. Pressure gauge to measure inside the cylinders. > Strain gauges attached at one face of the joint and filed with commenting material. > Xenditional strain gauges attached at the inside and outer surface of the oylinder to measure longtudinal and circumferential strains. > Cylinder is cosina apparatus is used to study the elastic failure under complex stresses. (Local / Pakistani Made) Specifications: > Load plate with counter balance. > Load plate with magnetic base reading up to Otim. > Suppled with user glube manual. > Load plate with counter balance. > Load plate with counter balance. > Load plate with counter balance. > Load plate with counter balance. > Load plate with counter balance. > Used to tas in Bending test: Aluminum, Steel, Bras, Copper Loads apparts is Used to othans. Worker of the sint Bending test: Aluminum, Steel, Bras, Copper Loads apparts is 20x20mm: h=300mm Worker of the with bars in Bending test:<			and strains in a thick-walled cylinder under				
8 Solution Combined bending & toxion appartus is used to study the gradiem multipleters for the cylinder is in two halves commuted ingesture inside the instrumental is the insthe is the instrumental is the			internal pressure. It is also used to measure				
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8 Specification: Specification: > Bench mounted machine, consists of a thick walled aluminum cylinder ki in a frame. > The cylinder is in two halves comented together 1 9 > The cylinder is in two halves comented together 1 > Cylinder kell in a frame. > > Cylinder kell in a frame. > The cylinder sontains oil. Pressure gauge to measure the pressure. 1 > Strain gauges attached at one face of the joint and filled with cementing material. > > Additional strain gauges attached at the inside and outer surface of the cylinder to measure longitudinal and circumferential strains. > Cylinder length 250mm - 400mm, outside diameter 150mm - 200mm. > > Supplied with user guide manual. Combined bending & torsion apparatus is used to study the elastic failure under complex stresses. (Local / Pakistani Made) Specifications: > Load plate with counter balance. > Load plate with mapetic base readings up to 0.01mm. Frame, 2 beaning blocks, torque generation device, 17 bars for bending tests Material for bars in Bending test: Aluminum, Steel, Brass, Copper • Height with LsW S10x20mm; h=310mm • Width with LsW S10x20mm; h=310mm	7		strains at the inner and outer surface of the				
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8 gauge to measure the pressure. > Strain gauges attached at one face of the joint and filled with cementing material. > Additional strain gauges attached at the inside and outer surface of the cylinder to measure longitudinal and circumferential strains. > Cylinder length 250mm – 400mm, outside diameter 150mm – 200mm. > Supplied with user guide manual. Combined bending & torsion apparatus Combined bending & torsion apparatus Combined bending & torsion apparatus Combined bending & torsion apparatus Combined bending & torsion apparatus Duad hangers, tools, ground steel mounting steel plate. > Load plate with counter balance. > Load plate with magnetic base readings up to 0.01mm. Frame, 2 bearing blocks, torque generation device, 17 bars for bending tests Material for bars in Bending test: Aluminum, Steel, Brass, Copper • Height with LXH S10x20mm: h=3100mm • Width with LXH S10x20mm: h=1050mm		CYL	Cylinders contains oil. Pressure				
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8 Operating material. > Additional strain gauges attached at the inside and outer surface of the cylinder to measure longitudinal and circumferential strains. > Cylinder length 250mm – 400mm, outside diameter 150mm – 200mm. > Cylinder length 250mm – 400mm, outside diameter 150mm – 200mm. > Supplied with user guide manual. Combined bending & torsion apparatus is used to study the elastic failure under complex stresses. (Local / Pakistari Made) Specifications: > Load plate with counter balance. > Load plate with counter balance. > Load plate. > Dial gauges with magnetic base readings up to 0.01mm. Frame, 2 bearing blocks, torque 1 generation device, 17 bars for bending tests Material for bars in Bending test: Aluminum, Steel, Brass, Copper • Height with LxW 510x20mm.+m310mm • Width with LxW		F	of the joint and filled with				
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8 Image: State in the cylinder to measure longitudinal and circumferential strains. > Cylinder length 250mm – 400mm, outside diameter 150mm – 200mm. > Supplied with user guide manual. > Supplied with user guide manual. > Supplied with user guide manual. > Supplied with user guide manual. Supplied with user guide manual. > Supplied with user guide manual. > Supplied with user guide manual. > Supplied with user guide manual. > Supplied with user guide manual. > Supplied with user guide manual. > Supplied with user guide manual. > Supplied with user guide manual. > Supplied with user guide manual. > Supplied with user guide manual. > Supplied with user guide manual. > Supplied with user guide manual. > Supplied with user guide manual. > Supplied with user guide manual. > Load plate with counter balance. > Load plate with counter balance. > Dial gauges with magnetic base readings up to 0.01mm. Frame, 2 bearing blocks, torque generation device, 17 bars for bending test: Aluminum, Steel, Brass, Copper • Height with LXW S10x20mm: h=30mm • Width with LXH S10x20mm: h=30mm • Width with LXH • SubxSomm: w=1030mm • Width with LXH S0x4mm: l=210510mm			at the inside and outer surface of				
8 Image: Solution of the second state is a second state			the cylinder to measure				
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8 Complex stresses. (Local / Pakistani Made) Specifications: > Load plate with counter balance. > Load hangers, tools, ground steel mounting steel plate. > Dial gauges with magnetic base readings up to 0.01mm. Frame, 2 bearing blocks, torque generation device, 17 bars for bending tests 1 Material for bars in Bending test: Aluminum, Steel, Brass, Copper • • Height with LxW 510x20mm: h=310mm • Width with LxH 510x5mm: w=1030mm • Length with WxH 20x4mm: l=210510mm			used to study the elastic failure under				
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Length with WxH 20x4mm: I=210510mm		-	510x5mm: w=1030mm				
20x4mm: I=210510mm			 Length with WxH 				
			20x4mm: l=210510mm				

		 LxWxH: 20x4x510mm (aluminum, steel, brass, copper) LxWxH: 10x10x510mm (aluminum) 				
		22 torsion bars				
		 Material for Bars in Torsion: Aluminum, Steel, Brass, Copper Length with D=10mm: 50640mm (Aluminum) DxL: 10x50mm/10x340mm. (Aluminum, steel, copper, brass) Diameter with L=50/340mm: D=512mm (steel) Dial gauge: 0 - 10mm, graduations: 0.01mm Tape measure, graduations: 0,01m Weights 				
		 1x 1N (hanger) 1x 1N, 1x 4N, 1X 5N, 1x 9N, 1x 12N 1 dial gauge with magnetic base reading up to 0.01 mm, 1 tape measure, 2 hexagon socket wrenches, 1 storage system and instructional manual. 				
9	CURVED BAR APPARATUS	 Curved bar apparatus The apparatus is used to measure the deflection of set of curved bars, of known geometry and to compare the empirical data with values calculated from theory. Specifications: Bench mounted machine with four test specimens including Ring, quadrant, davit and semicircle curved axis beam. Two deflection indicators reading up to 0.01mm. Load hangers and stirrups. Set of weights. Instruction Manual. (Country of Origin: USA, UK, JAPAN, EUOROPE, CHINA Or any other country) 	1			

10	CREEP TEST APPARATUS	 Creep test apparatus This apparatus is used to measure the ultimate load-carrying ability of a material as a function of time. It is also used for rupture test. Specifications: Conforming to ASTM E139-11. Bench mounted machine with adjustable feet's. Simple lever (load beam) with mechanical advantage of 6:1 to 8:1 used for loading purpose. Digital meter to measure the creep of the specimen under load. Load beam with ball-bearing pivot for correct loading of the sample. Weight hanger and set of weights. Glycol pack for effect of temperature on specimen (Country of Origin: USA, UK, JAPAN, EUOROPE, CHINA Or any other country) 	1			
11	COMPACTION FACTOR TEST APPARATUS	 Compaction factor test apparatus To calculate the compaction factor, and to know the workability of the fresh concrete Specifications: Conforming to BS 1881:103	1			
12	VIBRATING TABLE	 Vibrating table They are used to consolidate and compact the freshly placed concrete (Local / Pakistani Made) Specifications: ➢ Conforming to ASTM C1176 / C1176M-13. ➢ Vibrating table 1250mm x 650mm robustly manufactured with minimum noise level and also 	1			

		 contains retaining edges to avoid the fall of the mould. Supplied complete with two vibrating units and clamping device. Rate of vibration is 3600 vibrations per minute 				
13	LABORATORY ASPHALT PERMEAMETER	 Laboratory Asphalt Permeameter (Local / Pakistani Made) Specifications: Consisting of an acrylic tube 125 mm internal diameter, marked from 1 to 5 I cap, with internal rubber ball and rod. The permeameter is fit on a wooden base plate with sealing gasket. Weight approx.: 8 kg 	1			
14	BEAM MOULDS	 Beam moulds They are used in determination of flexural and split tensile strength of hardened concrete. (Local / Pakistani Made) Specifications: > Beam moulds made of steel with tamping rod and mould oil. > Conforming to ASTM C31, C78, C192, C293; AASHTO T23, T97 > 6" x 6" x 21" (152 x 152 x 533mm) > 6" x 6" x 30" (152 x 152 x 610mm) > 6" x 6" x 36" (152 x 152 x 762mm) > 6" x 6" x 36" (152 x 152 x 914mm) 	6			
15	WEATHER STATION	Weather Station Weather station is used to measure the pressure in the atmosphere, as well as other sensors to measure rain, wind, humidity and more. Specifications: USB Weather Station Starter Kit (15-Channel Weather Station) Accessories: i) Weather Station 3-Meter Tripod Kit ii) Pro CD or USB Drive (USB Cable Included) Software (Country of Origin: USA, UK,JAPAN, EUOROPE, CHINA Or any other country)	1			

16	WATER LEVEL DATA LOGGER DELUXE KIT	 Water Level Data Logger Deluxe Kit Water level data loggers are commonly used to determine stream flow over time and peak discharge. Specifications: Data logger (100' range) Data logger (30' range) for Barometric Pressure Waterproof shuttle Carrying case Software. (Country of Origin: USA, UK, JAPAN, EUOROPE, CHINA Or any other country) 	1			
17	MOISTURE RELEASE CURVES (SOIL)	 Moisture Release Curves (Soil) Soil Moisture Release Curve uses to produce the points for the moisture characteristic curve in the wet range, and to produce the points in the dry range. Specifications: Accuracy: 1.5 hPa (0 hPa to 820 hPa). Resolution: 0.01 hPa. Measurement range for tensiometers: +20 hPa to -1200 hPa / -2500 hPa. Dimensions without sample ring: PA66GFK, h = 60 mm, 80 mm. Interface: RS485 tensioLINK Accessories: Transport Box for Samples Soil Coring device with stopper Sample ring insertion tool Adapter set vacuum pump beaker mount balance Extra Sample ring (Country of Origin: USA, UK, JAPAN, EUOROPE, CHINA Or any other country) 	1			
18	DIFFERENTIAL AIR PRESSURE SENSOR WITH DATA LOGGER	 Differential Air Pressure Sensor with Data Logger Differential Air Pressure transducer can measure either air pressure or velocity with the flip of a switch. Specifications: Media Compatibility Dry air or inert gas Input Power 12-30VDC, or 24VAC nominal Output Field-selectable: 2-wire, loop-powered 4-20mA (DC only, 	1			

		 clipped and capped) or 3-wire 0- 5V/0-10V Pressure Ranges: Unidirectional: 0.1/0.25/0.5/1.0" W.C. F.S. (25 pa/50 pa/100 pa/250 pa, F.S.), switch selectable; Bidirectional: ±0.1/±0.25/±0.5/±1.0" W.C. F.S. (±25 pa/±50 pa/±100 pa/±250 pa, F.S.), switch selectable Response Time Standard: T95 in 20 sec, Fast: T95 in 2 sec, switch selectable Mode Unidirectional or bidirectional, switch selectable Display (option) Signed 3-1/2 digit LCD, indicates pressure, overrange indicator Proof Pressure 3 psid (20.6kPa) Burst Pressure 5 psid (34.5kPa) Accuracy ±1% F.S. of selected range (combined linearity and hysteresis) Temperature Effect 1" 0.05%/°C; 10" Zero Drift (1-year) 1" 2.0% max. Zero Adjust Pushbutton auto- zero and digital input (2-pos terminal block) Operating Environment 0°- 60°C (32° to 140°F); 0 to 90% RH non- condensing Fittings Brass barb; 0.24" (6.1mm) Physical UL 94 V-O Fire Retardant ABS (Country of Origin: USA, UK.JAPAN. 				
		EUOROPE, CHINA Or any other country)				
19	DOUBLE RING INFILTROMETER	 Double Ring Infiltrometer The double ring infiltrometer is a simple instrument that is used to determine the rate of infiltration of water into the soil. Specifications: ➤ Two stainless steel rings measure 12 and 24 dia x 20"H (304.8 and 609.6 dia x 508mm). ➤ Rings have double thick welded top edge for increased stability when driving into the soil. ➤ A mariotte tube provides a constant head of water for flow tests. ➤ Graduations on the side of the tube used to determine flow rate. 	1			

		 Sealed adjusting tube raises or lowers the head inside the infiltrometer ring. Main flow valve in base platform, bleed valve next to adjusting tube seal. Includes: 0.5" thick (12.7mm) aluminum driving cap with centering pins; two 6" square (152.4mm) neoprene splash guards; and two mariotte tubes 				
		with 3,000 ml and 10,000 ml capacities. (Country of Origin: USA, UK,JAPAN, EUOROPE, CHINA Or any other country)				
20	EVAPORATION PAN WITH ACCESSORIES	Evaporation Pan with Accessories An evaporation pan is used to hold water during observations for the determination of the quantity of evaporation at a given location. Such pans are of varying sizes and shapes, the most commonly used being circular or square. The best known of the pans are the "Class A" evaporation pan and the "Sunken Colorado Pan". (Local / Pakistani Made) Specifications:	1			
21	BASIC HYDROLOGY APPARATUS	 Basic Hydrology Apparatus Basic hydrology apparatus is used to calibrate rectangular weir under the catchment area to measure flow from the wells or the tank. (Local / Pakistani Made) Specifications: Stainless steel tank for rugged construction. 8 nozzles for rainfall simulation with plastic pipe network, stainless steel frame for holding plastic pipe network. Transparent side walls. Two wells. Minimum 12 pressure tapping points with manometers. Water input points on both ends with filtered side walls manual flow meter. 	1			

		 Self-contained pumping unit with flow meter. M/S coated base frame, plastic water tank with sand. 				
22	STANDARD RAIN GAUGE	 Standard Rain Gauge The rain gauge is a meteorological instrument for measuring the amount of precipitation (especially rainfall amounts) fallen during a given time interval at a certain location. Specifications: Orifice: 8" (200 mm). Capacity: 20" (500 mm). Resolution: 0.01" (0.25 mm). Material: Aluminium. Finish: White powder coat, anodized funnel. Size: 8" diameter x 27" H (210 mm x 686 mm). Comes with tripod support. 	1			
23	TIPPING BUCKET RAIN GAUGE	 Tipping Bucket Rain Gauge (8", 0.25 mm/tip) The rain gauge is a meteorological instrument for measuring the amount of precipitation (especially rainfall amounts) fallen during a given time interval at a certain location. Specifications: Orifice: 8" (200 mm). Capacity: 20" (500 mm). Resolution: 0.01" (0.25 mm). Material: Aluminium. Finish: White powder coat, anodized funnel. Size: 8" diameter x 27" H (210 mm x 686 mm). Comes with tripod support. 	1			
24	WEIGHING RAIN GAUGE SYSTEM	Weighing Rain Gauge System The rain gauge is a meteorological instrument for measuring the amount of precipitation (especially rainfall amounts) fallen during a given time interval at a certain location. (Local / Pakistani Made)	1			

		Current Meter, USGS Type AA (Cup Type)				
		This current meter is suspended in the				
		water using a cable with sounding weight				
		or wading rod (taking the tail section off)				
		and will accurately measure streamflow				
		velocities.				
		Specifications:				
		 This current meter is suspended in 				
		the water using a cable with				
		sounding weight or wading rod				
	E)	(taking the tail section off) and will				
	ТҮР	accurately measure streamflow				
	- d D	velocities from 0.1 to 25 feet per				
	(C	second (0.025 to 7.6 meters per				
25	AA	second). The main features of this				
	ΥPE	meter are the uniquely designed				
	IS T	bucket wheel shaft bearings and	1			
	JSG	the two post contact chamber.	_			
	IR, I	The bucket wheel has six conical				
	ETE	shaped cups, is five inches (12.7				
	Σ	cm) in diameter and rotates on a				
	EN.	vertical axis inside the yoke. The				
	JRR	tungsten carbide bearings for the				
	บ	bucket wheel shaft are located in				
		deeply recessed inverted cups.				
		When the meter is in use, these				
		cups become air chambers and				
		the entrapped air effectively				
		excludes water and silt from the				
		bearing surfaces giving extremely				
		low starting velocities and				
		minimal friction in the bearings.				
		(Country of Origin: USA, UK,JAPAN,				
		EUOROPE, CHINA Or any other country)				
		Tilting Flow Channel				
		The channel is designed for studying the				
		nydraulic now phenomena.				
		Specifications:				
	NEI	 Elumo cross soction 200 				
	ANI	Fluttle cross section . 500 mm wide 450 mm high				
26	CH	Flume length 7 5m				
	Ň	Tilting adjustment : -1% to $+3\%$	1			
	:10	 Side walls · Tempered glass 				
	9					
	TIN	Channel bed · Stainless steel				
	Ĩ					
		Sluice gate : Stainless steel, built-				
		in at down-stream end of flume.				
		Flow measurement: Flow digital				
		display			 	

	 Power supply : 380 V, 3 Ph, 50 Hz. Other power supply is available on request. Flume dimensions: 300 mm wide, 450 mm high. Flume length: 7.5 m. Tilting adjustment: -1% to +3%. Channel bed: Stainless steel. Head tank: Stainless steel. Self-contained unit with storage tank, has adequate water to fill the full channel. Sluice gates: Stainless steel, rack and pinion type, built-in at downstream end of flume. Circulating pump: 5.5 kW with a maximum flow rate approximately 1800 lpm. Flow measurement: Flow digital display. Power supply: 380V, 3Ph, 50Hz. Stainless steel hook and point gauge. Basic weir plate with stainless steel V notch and rectangular notch weir attachment. Sharp crested weir. Broad crested weir, sharp edges. Computer control; includes sensors, inverter and instrument box with computer interface 			
	unit and software for data display and control of flow-rate and tilting by			
	computer.			
	Accessories:			
	Stainless steel hook and point			
	gauge.			
	rectangular notch weir sharp			
	crested weir broad crested			
	weir crump weir trapezoidal			
	Welr.			
	edge.			
	 Sluice gate. 			
	Radial gate.			
	(Country of Origin: USA, UK, JAPAN,			
I				
	Total Amount			

Note:

- Item(s) should be of the same Brand/Model/Specs or Equivalent
- ➢ For technical queries please contact with Dr. Khan Zaib Jadoon, Chairman, DCE during office timings (08:00 A. M-03:30 P. M) on phone # 9019484.

CONTRACT / AGREEMENT

THIS CONTRACT/ AGREEMENT is made on the _____, 201____

BETWEEN

INTERNATIONAL ISLAMIC UNIVERSITY, ISLAMABAD, a Public Sector University of the Government of Pakistan incorporated under the laws of Islamic Republic of Pakistan and having its principal place at Sector H-10 Islamabad (hereinafter called "the Purchaser"),

AND

M/s _______ incorporated under the laws of Pakistan and having its principal place of business at ______, Pakistan (hereinafter called "the Supplier").

Sr. No.	Item Name	Specifications	Qty.	Make/Model/ Country of Origin	Unit Price	Total Price	
	TOTAL						

The Purchaser and the Supplier agree as follows:

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

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

- (a) The Tender Document "Terms & Conditions"
- (**b**) BoQ
- (c) The Certificate (As referred at # 27 of Tender Document)
- (*d*) The Purchase Order
- (e) The Special Conditions

3. In consideration of the payments to be made by the Purchaser to the Supplier/Manufacturer as indicated in this Agreement, the Supplier hereby covenants with the Purchaser to execute the Goods and Related Services and to remedy defects therein in conformity in all respects with the provisions of the Contract/Purchase Order.

4. The Purchaser hereby covenants to pay the Supplier/Manufacturer in consideration of the supply of the Goods and Related Services therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract/Purchase Order.

Agreement to be executed in accordance with the laws of Islamic Republic of Pakistan on the day, month and year indicated above.

Signed by:	Signed by:				
For and on behalf of the Purchaser	for and on behalf the Supplier				
In the presence of:	in the presence of:				
Witness,	Witness				
Signature:	Signature:				
Name:	Name:				
Address:	Address:				
Date:	Date:				

SPECIAL CONDITIONS

1. Specifications and Standards:

1.1 The Supplier shall ensure that the Goods and Related Services comply with the technical requirements.

2. Packing and Documents:

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

3. Transportation:

3.1 Unless otherwise specified, responsibility for arranging transportation of the Goods shall be in accordance with the specified <u>Incoterms</u>.

4. Warranty:

- 4.1 The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise by the Purchaser.
- 4.2 Unless otherwise specified in these conditions, the warranty shall remain valid for <u>twelve (12) months</u> after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in these conditions or for eighteen (18) months after the date of shipment, from the port, or place of loading in the country of origin, whichever period concluded earlier.
- 4.3 The Purchaser shall give notice to the Supplier stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The purchaser shall afford all reasonable opportunity for the Supplier to inspect such defects.
- 4.4 Upon receipt of such notice, the Supplier shall, <u>within the 30 days</u> expeditiously repair or replace the defective Goods or parts thereof, at no cost to the Purchaser (IIUI)

5. The Payment Terms will be:

- 5.1 For the CPT/CFR quoted items; payment will be made through irrevocable L.C (90:10 Model) in favor of Manufacturer. Where, 90% in this model will be released upon receipt of shipment and delivery documents. Remaining 10% will be made / released after successful inspection of the equipment at International Islamic University Islamabad.
- 5.2 For the FOR quoted items; 100% payment will be made after supply and successful inspection of the ordered equipment(s) at International Islamic University Islamabad after deduction of 10% retention money as per "Terms & Condition"