

**TECHNICAL & HIGHER EDUCATION INSTITUTIONS SOCIETY,
U.T. OF DAMAN & DIU
OFFICE OF THE PRINCIPAL
GOVT. POLYTECHNIC-DIU
FORT ROAD, DIU: 362520**

No. 5.1/THEIS/GP-DIU/TENDER/2018-19/240

Dated: 07/03/2019

E-TENDER (ONLINE TENDER)-ID -356419

Sealed tenders are hereby invited by the Principal. Govt. Polytechnic - Diu for supply of **Civil Engineering Equipment's**, as stated below as per the terms and condition stipulated attached herewith. Tender documents should be submitted along with nonrefundable tender fees of Rs. 500/- DD, in favour of Daman & Diu Society for Technical Edu. & Higher Edu. (CENT) and refundable E.M.D Rs. 89,500/- of the total cost of supply items in favor of Daman & Diu Society for Technical Edu. & Higher Edu. (CENT). With the **VAT / GST Department of U.T. of Daman & Diu (Lowest bidder must obtain local VAT/GST Registration within 15 days)**

Last date of Submission of Tender : 27/03/2019 at 12:00 PM
Opening of Tender : 27/03/2019 at 03:00 PM (if Possible)

Sr. No.	Configuration/ Specification	Qty.	Rate	Total
1.	<p>Computerized Universal Testing Machine of 200T Capacity (2000kN) with computer & Printer, Maximum Capacity 2000 kN or 200T Least Count (kN) 0.1 Accuracy ±1% Clearance for Tension Test (mm) 50 – 850 Clearance for Compression Test (mm) 0 – 850 Piston Speed Adjustable Clearance between Columns (mm) Minimum 750 Voltage 400-440V</p> <p>Supply Three Phase supply</p> <p>For Tension Test Clamping Jaws for round specimens 8 mm – 45 mm Clamping Jaws for flat specimens 0 mm – 65 mm</p> <p>For Compression Test Pair of compression plates Minimum 220 mm</p> <p>For Transverse Test Table with the adjustable rollers Width of rollers Minimum 160 mm Diameter of rollers Minimum 50 mm Max. clearance between supports 800 mm Radius of punch tops 16 mm, 22 mm</p> <p>Computer: i3 processor, 1 TB HDD, 8 GB RAM, DVD R/W drive, key board, optical mouse, 6 USB ports, 17" TFT screen with UPS 500 VA</p> <p>Software Package: User friendly Software should be provided with the system to control the machine and analyze the various result parameters.</p> <p>Printer: DeskJet Colored</p> <p>The software shall have following features:-</p> <ul style="list-style-type: none"> • Windows based & user friendly • Programming of Rate of Loading. • Safety features for overload and over travel • Saving & Retrieving of Test Files • On line display of Load & Displacement • Start, Stop, Hold operation • Inching/Release operation to set Sample • Online Plot of Graph for single sample and multi sample • Display of recorded Data on the Screen • Storing of Data in Numeric form • Calculation of various parameters (Tensile Strength, Young's Modulus, Yield Stress, Ultimate Stress, % Elongation, max. strain etc.) <p>ACCESSORIES TO BE SUPPLIED WITH THE MACHINE Clamping Jaws for round specimens 8mm – 45mm</p>	1		

	<p>Clamping Jaws for flat specimens 0mm – 65mm Pair of compression plates Minimum 220mm Transverse test attachment Diameter of rollers 50mm Radius of punch tops 16mm, 22mm</p> <p>SOME OTHERS REQUIREMENTS:</p> <ul style="list-style-type: none"> • Bend – Rebend Test Attachment • Shear Test Attachment suitable for size 6mm, 10mm, 12mm, 16mm, 20mm, 25mm diameter. • Load Stabilizer suitable for stabilizing load at any particular point for about 10 minutes • Wire Rope Test: Attachment suitable to carry out Tensile Test on wire ropes up to 10mm • Electronic Extensometer: Gauge length of 50mm and +50% measuring range sensitivity of 1 micron. Suitable for using for round and flat specimens • The machine shall be suitable for testing the cylindrical rock specimen of size 38- 40 mm dia. & 76-80 mm in length. 			
2.	Cube Moulds ISI marked cube Mould 150 x 150 x 150 mm	6		
3.	Cube Moulds ISI marked cube Mould 70.6 x 70.6 x 70.6 mm	6		
4.	Cylinder molds ISI Marked 150 mm dia x 300 mm high, The moulds is split vertically into two parts. The mean internal diameter in within +/-0.2mm and height is within +/-1mm. The ends are machined to +/-0.05. The base plate and top plate are machined flat to +/-0.03mm.	6		
5.	Beam mould, 100 mm x 100 mm x 500 mm made of Cast Iron Made of Cast Iron / Mild Steel. The mould are made of 4 plates assembled together. Each mould is supplied complete with base plate. Faces are machined flat to ± 0.2mm. And finished in size to 0.2 mm	6		
6.	Slump cone test apparatus, The slump cone has internal dimensions 20 cm dia at base 10 cm top dia and 30 cm height Foot pieces can be fixed to the clamps on the base plate The base plate has lifting handle for easy transportation One graduated steel rod 16 mm dia x 600 mm long, rounded at one end and graduated in mm, is also supplied	1		
7.	Vibrating table It is designed to carry a load of 140 kg. The apparatus consists of a motor fitted with a variable pitch pulley housed in a cabinet. The vibrations are imparted by means of off-balance masses rotating on a shaft of a vibrator clamped to the underside of the table top. The table top is 50cm x 50cm. and has stops along its edges to prevent moulds from walking off the table during vibration. A cross arm adjustable on a vertical rod at the center of the table is provided to hold the moulds while operating the table. The variable pitch pulley arrangement permits the frequency to be varied between a maximum of 3600 vibrations per minute. A speed regulation handle is provided for increasing or decreasing the frequency. A switch is provided for starting the motor, suitable for operation on 440 volts, 3 phase, 50 cycles, A.C.supply.Vibrating Tables of table top size 75cm x 75cm as well as 100cm x 100cm are also available	1		
8.	A standard metal thickness gauge(for Flakiness Index)	1		
9.	Length gauge (for Elongation Index)	1		
10.	Le-chatelier molds (Set of Six) With two glass plates and lead a transparent disc is screwed. A brass cylinder mold split down one side and provided with two parallel indication arms.	1		
11.	Flow table apparatus, As Per IS 9103 – 1999 A conical mould having 130mm Top Dia x 200mm Base Dia and 200mm Height. A flow table having mild steel top having plain area of 700x700mm. The center of the table is scribed with cross	1		

	lines which run parallel of and out to the edges of the table and a circle of 200mm dia at the center of the table. This flow table is hinged with the base frame using externally mounted hinges. An upper stop is provided at each side of the table so that the lower front edge of the table can only be lifted 40mm.			
12.	Rebound Hammer, Type with aluminum body case calibrated in Kgf / Cm (Analog) Range : 10 – 70 N/mm	1		
13.	Ultrasonic pulse velocity tester battery operated, Conforming to EN 12504-4 and ASTM C597 Specifications - Microprocessor incorporated - Frequency range: 24 to 150 kHz - Receiver input impedance: 1 M ohm - RS 232 output - Connectable to oscilloscope - Transit time measurement: from 0.1 to 1999.9 microsecond - Pulse rate: from 1 to 10 per second, selectable - Resolution: 0.1 microsecond - Transmitter output: 800V - The tester is supplied complete with two 54 kHz transducers (transmitter and receiver) with 3 m cable, calibration rod, coupling agent (250 cc bottle), nylon carrying case	1		
14.	Apparatus for aggregate crushing test, <ul style="list-style-type: none"> Steel cylinder with open ends and internal dia 152mm, square base plate, plunger having a piston of dia of 150 mm, with a hole provided across the stem of the plunger so that a rod could be inserted for lifting or placing the plunger in the cylinder Cylindrical measure having internal dia of 115 mm and height 180 mm Steel tamping rod with 1 rounded end, having a dia of 16 mm and length 450 to 600 mm	1		
15.	Aggregate Impact testing machine, As per IS: 2386 (IV) 9377. This Apparatus is used to determine aggregate impact value of coarse aggregate. The hammer of the tester fall freely from 380 mm height on coarse aggregate for 15 times/ 15 sec.the crushed aggregate removed from the cup ,then sieved and weighed. The % ratio of the weight passing 2.36mm sieve and weight of oven dried sample is Aggregate Impact value. The instrument consists of a circular base with two vertical guides. The hammer of weight 13.75 ±0.25 kg can be raised to fall freely down the vertical guides. The height of fall can be adjusted through 380 ± 5mm. The hammer is provided with a locking arrangement. The hammer falls freely to the base and is removable for emptying. Supplied complete with metal measures 75mm dia x 50mm high (for specimen preparation) and tamping rod 230mm long x 10mm dia.	1		
16.	Los angles Abrasion test machine, Dimensions approx.: 1005x820x950 mm Power supply 230 V, 50 Hz, 1 ph Set of 12 abrasive charges conforming to Indian standard	1		
17.	Simple beam & fixed beam load frame for deflection test with weights	1		
18.	Concrete mixer 1 bag capacity tilting type	1		
19.	Half cell potentiometer	1		
20.	Density basket	1		
21.	Simple machines simple wheel and axle with weights, 30cm	1		
22.	Simple machines simple purchase crab with weights	1		
23.	Simple machines double purchase crab	1		
24.	Simple machines wheel and differential axle	1		
25.	Worm and worm wheel, Single	1		
26.	Simple screw jack	1		
27.	Inclined plain with pan and weights	1		
28.	Jib crain	1		
SOIL MECHANICS				
29.	Core Cutter	1		
30.	Steel Dolly	1		
31.	Rammer	1		

32.	Pycnometer Bottle, Test is performed as per IS: 2720 (Part-III). Suitable for determination of specific gravity of sand and fine gravel. The apparatus consists of a glass jar of 1 kg capacity, complete with brass cone, rubber seal and screwed cap.	6		
33.	Standard Proctor Apparatus, Rammer 2.6 kg x 310 mm controlled fall through guide tube. Rammer 4.89 kg x 450 mm controlled fall for heavy compaction test as per IS-2720 part VII.	1		
34.	Liquid Limit Device, Conforms to IS :2720	1		
35.	Palette knife	2		
36.	straight Edge	1		
37.	Steel Rule	1		
38.	Bowl	10		
39.	Spatula	2		
40.	Sand pouring Cylinder, The apparatus is suitable for field density estimation of fine and medium grained soils, as per IS: 2720 (Part XXVIII). It consists of: i) Sand Pouring Cylinder 115 mm internal dia with conical funnel and shutter. ii) Calibrating Container, 100 mm inner dia and 150 mm deep with flange 50 mm wide. iii) Metal tray 300 mm square x 40 mm deep with a 100 mm dia hole at the centre.	1		
41.	HOT AIR OVEN-BOTTOM HEATED Double wall chambers inner made of SS and outer of Mild Steel sheet duly powder coated with 2½" thick glass wool insulation. Temperature is controlled by an imported thermostat with an accuracy of +/-1°C and working temperature of above 50°C to 250° C and without thermometer. Size: 600 x 600x600 includes	1		
42.	Shrinkage Limit Apparatus, conforms to IS: 10077,	1		
43.	Direct Shear Apparatus Electrical Single Speed, 3 speed, Motorised IS : 2720 (Part XIII) IS:11229 It comprises :- i) Shear box assembly, 60 mm square, complete with a U-bracket, guide pins and spacing screws, made of brass. ii) Gripper assembly consisting of two plain grid plates, two perforated grid plates, one base plate and one loading pad, all made of brass. iii) Two porous stones, each 6 mm thick, fitting the shear box iv) Shear box housing of brass, complete with two ball roller strips. v) Loading unit with normal loading of 8 kg/cm ² on 60 mm square specimen. vi) Specimen cutter for a specimen size of 60 mm x 60 mm x 25 mm. vii) The unit is provided with a turret type gear box to get 3 different constant rates of strain and arrangements to carry out residual shear strength tests. Supplied complete with 1 No. proving ring and 2 Nos. of dial gauge of 0.01 x 25 mm	1		
44.	IS Proctor compaction apparatus Standard, Compaction Mould 100 mm internal dia x 127.3 mm height, 1000 ml volume complete with collar and base plate, all made of gun metal tie rods of mild steel	1		

	and wing nuts for clamping. 2. Compaction rammer, light, made of mild steel 2.6 kg weight, 50 mm dia compaction face, and 310 mm controlled free vertical fall. 3. Compaction rammer, heavy, made of mild steel 4.89 kg weigh, 50 mm dia compacting face, 450 mm controlled free vertical fall.			
45.	Permeability Apparatus(can conduct constant head and falling head experiment) IS: 2720 (Part-17), IS 11209 It comprises:- i) Compaction Permeameter Mould 1000 ml capacity, clamped between top and bottom drainage plates having recess for porous stones. Supplied along with a false bottom plate for use during compaction of soil in the permeameter and extension collar. ii) Stand pipe panel, with three glass tubes of 6 mm, 10 mm and 20 mm dia, one meter long, supplied with wooden meter scale and 3 meter rubber tubing	1		
46.	Split Spoon Sampler	1		
47.	Proving rings			
	1000 kg, (10 KN)	1		
	500kg, (5 KN)	1		
	100kg (1 KN)	1		
48.	Auger outfit with heads, 100 mm dia	1		
49.	Consolidate apparatus, Single gang	1		
50.	Unconfined compression testing machine	1		
TRANSPORTATION ENGINEERING				
51.	Ductility testing machine, The rates of pull of 50 mm/min and 10 mm/min are incorporated. Suitable for operation on 230 volts, 50 cycles, single phase, A.C. supply	1		
52.	Penetration testing machine, Automatic Bitumen Penetrometer Electrically operated, including adjustable weight arrangement.	1		
53.	Flash & Fire Point Test Apparatus, It consists of brass test cup with handle removable cup cover with the spring operated rotated shutter having oil test jet flame device, stirrer with flexible shaft.	1		
54.	California Bearing ratio (CBR) test, 1. Cylindrical mould with inside dia 150 mm and height 175 mm, provided with a detachable extension collar 50 mm height and a detachable perforated base plate 10 mm thick. 2. Spacer disc 148 mm in dia and 47.7 mm in height along with handle. 3. Metal rammers. Weight 2.6 kg with a drop of 310 mm (or) weight 4.89 kg a drop 450 mm. 4. Weights. One annular metal weight and several slotted weights weighing 2.5 kg each, 147 mm in dia, with a central hole 53 mm in diameter. 5. Loading machine. With a capacity of atleast 5000 kg and equipped with a movable head or base that travels at a uniform rate of 1.25 mm/min. Complete with load indicating device. 6. Metal penetration piston 50 mm dia and minimum of 100 mm in length. 7. Two dial gauges reading to 0.01 mm.	1		
55.	Standard Ring and Ball Apparatus, Steel balls 2 No, each 9.5mm in diameter and weighing 3.5 + 0.05 grams. • Brass rings 2 No, the rings shall be tampered and shall confirm to the following Depth : 6.4 + 0.1mm Inside diameter at bottom : 15.9 + 0.1mm Inside diameter at top : 17.5 + 0.1mm Outside diameter : 20.6 + 0.1mm • Thermometer capable of reading temperature up to 0 to 250 0 C. • Water bath should be a heat resistant glass vessel not less than 85mm in diameter and 120mm in depth. • Stirrer shall be mechanical operated to ensure uniform heat distribution at all times throughout the water bath.	1		
56.	Specific gravity bottle. 50 ml	6		

	SURVEYING LAB			
57.	TOTAL STATION Having 30X Magnification 1" Least Count and 2" Accuracy Distance Measuring range of 1.8KM with single Prism Alphanumeric Key Board (Dual Display) with standard accessories Batteries Charger – 01 Nos. Batteries – 01 Nos. Manual 01 Nos. Tool kit – 01 Nos. Carrying case - 01 Nos. Plumbob – 01 Nos. Data Downloading cable 01 Nos. Software Prism with holder and target – 01Nos. Prism pole – 01 Nos. Aluminum Tripod 01 Nos.	1		
58.	Fibre tape 30m.	5		

All the suppliers are directed to scanned the following documents:-

- VAT/GST Registration.
- Latest Solvency Certificate 40% of Estimate cost within one year from the last date of tender Uploading.
- PAN Card.
- Tender EMD in form of FDR (Jointly) valid for 6 months i.e. (180 days) from the last date of tender uploading.
- Tender Fee in form of Demand Draft (Non Refundable).
- Experience certificate.
- Registration Certificate
- Labour License Registration.

The documents prescribed in the NIT to be submitted alongwith bid.

For supply items Authorized Dealers, Vendors, Suppliers, etc. can also bid for Tender.

For Electrical works Electrical license is mandatory.

If the scanned copy of the above documents are not visible during opening of the tender the tender shall not be downloaded.

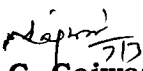
Quantities may vary according to the requirement.

TERMS & CONDITIONS

1. Eligibility:
 - i. The bidder should be registered under Sales Tax/VAT, GST.
 - ii. The bidder should have their support center at Diu or nearby.
2. The Earnest Money Deposit (EMD) of Rs. 89,500/- is payable in the form of FDR/Demand Draft issued by Scheduled Bank in favor of **Daman & Diu Society for Technical Edu. & Higher Edu. (CENT)** payable at Diu. Tender received without Earnest Money Deposit will be treated as invalid.
3. The rate(s) quoted should be strictly for free door delivery at Diu Districts respectively & will be valid and operative for supply order issued on or before.
4. The rates should be quoted inclusive of all taxes, installation & commissioning charges.
5. No extra charge for packaging, forwarding and insurance, transportation etc. will be paid in addition to the rates quoted.

Financial Bid Cover.

1. The rates should be quoted only for the items specified in the list of requirement and should be for the items of given special make /manufacture.
2. Rates quoted for items other than the required specification/ make/manufacture may not be considered.
3. The decision of the Principal, Govt. Polytechnic-Diu for acceptance/rejection of any articles supplied including the decision for equivalent specifications, standard and quality etc. of articles shall be final.
4. The Purchase Committee will open the Tenders online in presence of tenderer(s) or their representatives, if any presents in the Office of the Principal, Govt. Polytechnic-Diu on **27/03/2019 at 03:00 pm.**
5. The Principal, Govt. Polytechnic-Diu will be at liberty to accept the tender for the entire quantity or the part thereof at the rates submitted by the Bidder or at reduced rate during the negotiations if any.
6. Rates tendered/offered in response to the concerned Tender Notice by the successful bidder shall be considered as acceptance of all above terms and conditions for supply for all legal purpose.
7. (a) The Successful Tenderer will have to pay an amount equal to 05% of the total value of articles mentioned in the supply order within 10 days from the date of the order as Security Deposit in form of FDR/ Demand Draft in favor of **Daman & Diu Society for Technical Edu. & Higher Edu. (CENT)**. The successful bidder has to submit performance bank guarantee(here after referred to as Security Deposit) from any nationalized bank of **05% amount of his final offer towards performance security within 15 days from the date of issue of supply order for the duration of warranty period.**
(b) Non-receipt of Security Deposit within stipulated time limit will result in automatic cancellation of the order for supply without any intimation.
8. The Earnest Money(s)/Security Deposit(s) paid by the tenderer(s) earlier against any tender(s) or supply order(s) is/are not adjustable with Earnest Money or Security Deposit required as per conditions of this tender.
9. All bills should be in Triplicate and should invariably mention the number and date of supply order.
10. All bills for amount above Rs. 5,000/- should be pre-receipted on a Revenue Stamp of proper value. Bills for amount exceeding Rs. 5,000/- not pre-receipted on Revenue Stamp of proper value will not be accepted for payment.
11. Each bill in which Value Added Tax is charged must contain the following certificate on the body of the bill.
"CERTIFIED that the goods on which Value Added Tax has been charged have not been exempted under the Central Sale Tax Act or the Rules made there under and the amount charged on account of Value Added Tax on these goods is not more than what is payable under the provisions of relevant Act or Rules made there under".
12. In respect of any dispute given rise to the legal proceedings between the parties, the courts at Daman and Diu & DNH shall alone have the jurisdiction.
13. The tender can be submitted up-to **12:00 pm 27/03/2019** and shall be opened on same day at 03:00 hrs if possible in the office of the Principal, Govt. Polytechnic-Diu or in the office of the Hon'ble Collector, Diu in the presence of the Purchase committee and Tenderer(s) or their representative(s) if present.
14. Items should be covered by 'onsite warranty' for a period of One year (or mentioned in specification) from the date of installation and bidder must have service/support location at local level i.e. Diu or nearby.
15. The designated committee will check quality of the **Civil Engineering Equipment's** supplied before installation at Principal, Govt. Polytechnic-Diu.


(N. G. Gajwani)
Principal
Govt. Polytechnic-
Diu.