

9	Orifice and jet apparatus Cylinder diameter : 150 mm Orifice diameter : 4 mm and 8 mm or 3 mm and 6 mm Trajectory probes : 8, stainless steel. Maximum constant head : 420 mm Measuring cup : 1 l	40	0	5	0	4	4	53	Pakistan Model: SMT-SJF-2229	40	0	5	0	4	4	53	FM-1849-05 EES, Pakistan	40	0	5	0	4	4	53	SMT-FM-11	0	0	0	0	0	0	0	0	Not Quoted	
10	Pipe friction apparatus Cylinder diameter : 150 mm Adjustable constant head : 800-1000 mm Water manometer : 450 mm x 1 mm graduation. Mercury manometer : 450 mm x 1 mm graduation. Test pipe : Stainless steel, 3 mm approx ID. Test section length : 510 mm Measuring cup : 1 l	40	0	5	0	4	4	53	Pakistan Model: SMT-SPF-2301	40	0	5	0	4	4	53	FM-1849-17 EES, Pakistan	40	0	5	0	4	4	53	SMT-FM-08	0	0	0	0	0	0	0	0	Not Quoted	
11	Cylinder diameter : 150 mm Test pipe inside diameter : 9-11 mm acrylic or 13 mm glass. Length of test pipe : 720 mm Dye reservoir : 0.2 l Measuring cup : 2 l	40	0	5	0	4	4	53	Pakistan Model: SMT-SRN-2273	40	0	5	0	4	4	53	FM-1849-09 EES, Pakistan	40	0	5	0	4	4	53	SMT-FM-09A	0	0	0	0	0	0	0	0	Not Quoted	
12	Flow meter demonstration apparatus Variable area flow meter : up to 35 lpm. Venturidiameters : 29 mm inlet with 17 mm throat.Orifice plate diameter : 20 mm on 29 mm diameter tube. Pitot tube : On 19 mm diameter tube. Water manometer : 8 tubes x 450 mm x 1 mm graduation. Complete with frame.	40	0	5	0	4	4	53	Pakistan Model: SMT-SFM-2234	40	0	5	0	4	4	53	FM-1849-10A EES, Pakistan	40	0	5	0	4	4	53	SMT-FM-20	0	0	0	0	0	0	0	0	Not Quoted	
13	Bends and Fitting Apparatus Pipe diameter (nominal) : 20 mm or 3/4 in approx.. Enlarged pipe diameter (nominal) : 35 mm or 1-1/4 in approx. Bends : 90oMiter bend, 90o small radius bend, 90o large radius bend Fittings : 90o Elbow, 45o elbow (2 each), sudden expansion, and sudden contraction. Water manometer : 8 tubes x 450 mm x 1 mm graduation.	40	0	5	0	4	4	53	Pakistan Model: SMT-SELBF2319	40	0	5	0	4	4	53	FM-1849-13 EES, Pakistan	40	0	5	0	4	4	53	SMT-FM-03	0	0	0	0	0	0	0	0	Not Quoted	
14	Free and forced vortex apparatus Cylinder diameter : 250 mm Height to over flow point : 180 mm Orifice diameters : 8, 12, 16 and 24 mm Distance from center of depth probes : 0, 30, 50, 70, 90 and 110 mm Pitot tube measuring points : 15, 25 and 30 mm radius.	40	0	5	0	4	4	53	Pakistan Model: SMT-SFV-2276	40	0	5	0	4	4	53	FM-1849-11 EES, Pakistan	40	0	5	0	4	4	53	SMT-FM-13	0	0	0	0	0	0	0	0	Not Quoted	
15	Flow through Orifice Apparatus Cylinder diameter : 150 mm Standard orifice : 13 mm diameter, sharp edge. Maximum head : 370 mm Traverse travel : 0.01 mm division.	40	0	5	0	4	4	53	Pakistan Model: SMT-SOD-2230	40	0	5	0	4	4	53	FM-1849-08 EES, Pakistan	40	0	5	0	4	4	53	SMT-FM-05	0	0	0	0	0	0	0	0	Not Quoted	
16	Laminar flow analysis table Channel size : 260 mm wide x 360 mm long, Small holes : 5, Dye reservoir : 0.5 l, Number of streamlines : 19, Models : Made from rubber Circle, 2 Rectangle, 2 Aerofoil and 2 Canal banks.	40	0	5	0	4	4	53	Pakistan Model: SMT-SLF-T2298	40	0	5	0	4	4	53	FM-1849-25 EES, Pakistan	40	0	5	0	4	4	53	SMT-FM-43	0	0	0	0	0	0	0	0	Not Quoted	
17	Tools Kit (Spanner Set, Plier Set, Screw Driver Set, Mallet/Rubber Hammer, Hammer, L-Key Set)	40	0	0	0	4	4	48	Pakistan	40	0	0	0	0	4	44	Pak	0	0	0	0	0	0	0	0	Not Quoted	0	0	0	0	0	0	0	0	Not Quoted

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COMPARATIVE STATEMENT FOR PROJECT:193198- INTRODUCTION OF B.TECH PROGRAM AT GOVT. COLLEGE OF TECHNOLOGY KHAR DISTRICT BAJAUR

DATE OF TENDER OPENING 09-03-2022

CIVIL TECHNOLOGY (PUBLIC HEALTH ENGG. LAB)

Item No.	Name of Items	KBL, Lahore							Anmol Scientific, Lahore							Inter Mark Islamabad									
		C.S		P.C		P.L.P		T	Model	C.S		P.C		P.L.P		T	Model	C.S		P.C		P.L.P		T	Model
		40	5	5	2	4	4	60		40	5	5	2	4	4	60		40	5	5	2	4	4	60	
1	Digital pH and conductivity /TDS meter and thermometer Combination pH / EC / TDS tester / thermometer Temperature in °C or °F EC (Electrical Conductivity) in micro Siemens TDS (Total Dissolved Solids) in ppm Measurement Stability Indicator Replaceable pH Electrode Automatic pH Calibration at standard and NIST Buffer Sets Automatic Temperature Compensation (ATC) Adjustable Temperature Coefficient Factor Rugged, Floating Waterproof Casing Range and accuracy: pH: 0-14±0.05 pH Electric Conductivity(TDS) :0 to 3,999 µS/cm (0-2000ppm/cm) ±2% full scale. Temperature 0.0 to 60.0 ±0.5 °C Resolution : pH: 0.01 Electric Conductivity(TDS) :1µS/cm (1 ppm/cm)	0	0	0	0	0	0	0	Not Quoted	40	0	0	0	4	4	48	PHS-25 CHINA	40	5	5	0	4	0	54	JY-9908 ZHONGZHOU China
2	Spectrophotometer Wavelength range 190 nm - 1,100 nm, Photometric accuracy (K2Cr2O7) ±0.01A, Wavelength accuracy ±1.0nm, Resolution (Toluene in hexane) >1.5, Stray light (KCl, 198nm) >2. Complete with Cuvettes and Accessories.	0	0	0	0	0	0	0	Not Quoted	40	0	0	0	4	4	48	UV1100 CHINA	40	0	5	0	4	0	49	7600-1 ZHONGZHOU China
3	Portable Turbidity meter Ranges: In automatic range mode:0-9,99,0-99,9 and 0-1000 NTS Dimension: 22.2x9.5x8.9 cm	0	0	0	0	0	0	0	Not Quoted	40	0	0	0	4	4	48	WGZ-1B CHINA	38	0	5	0	4	0	47	WGZ-38 ZHONGZHOU China
4	B.O.D. Apparatus Range: 0 - 700 mg/L Selectable: 0 - 35, 0 - 70, 0 - 350, or 0 - 700 mg/L BOD (Biochemical Oxygen Demand), Drift: < 3 mg/L BOD in 5 days 6x473-ml amber glass BOD bottles, Power supply 115/230V, Power cords, 6x magnetic stir bars	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	AN-128 PAK	40	0	5	0	4	0	49	JC-870H ZHONGZHOU China
5	Bacteriological Analysis kit With consumables for 200 tests.	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	AN-129 PAK	0	0	0	0	0	0	0	Not Quoted
6	Microscope Eyepieces: 10x & 16x Magnification; 10x, 25x 40x Working distance : 10.8. 4.2. 2.8 mm	0	0	0	0	0	0	0	Not Quoted	40	0	0	0	4	4	48	107B CHINA	36	0	5	0	4	0	45	B-204 ZHONGZHOU China

7	C.O.D Apparatus Complete kit with COD Digester, COD Titrator, COD Vessels and Air Condensers Glass Tube 38mm dia, 15 nos (5x3 rows), Sample Volume 20ml. Each. Temp. Range above ambient to 180 deg.C or higher.	0	0	0	0	0	0	0	Not Quoted	40	0	0	0	4	4	48	AN-130 CHINA	0	0	0	0	0	0	0	Rejected Not as per Specifications
8	Portable D.O meter Automatic range mode: 0-9.99,0-99.9,0-1000NTU Dimension: 22.2x9.5x8.9cm	0	0	0	0	0	0	0	Not Quoted	40	0	0	0	4	4	48	JPB-607-A CHINA	36	0	5	0	4	4	49	SX-816 ZHONGZHOU China
9	Water bath Volume 22 l, with audible and visible alarm, overheat shut-out safety device, temp. range	0	0	0	0	0	0	0	Not Quoted	40	0	0	0	4	4	48	HH-6 CHINA	40	0	5	0	4	4	53	DK-528 ZHONGZHOU China
10	Incubator with fan Temperature range: 0 to 45° C Temperature uniformity: ±0.5 @ 20° C Ext. Dimension: 48x53x95 cm	0	0	0	0	0	0	0	Not Quoted	40	0	0	0	4	4	48	DNP9022 CHINA	40	0	5	0	4	4	53	TMS-9002-160 ZHONGZHOU China
11	Autoclave Temp range 105oC to 138oC, Chamber Volume 120 Liter to 310 Liter.	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	AN-131 PAK	38	0	5	0	4	0	47	WS-150YDA ZHONGZHOU China
12	Manesty (Distilled water plant) Capacity Output 4 Litre /Hr, Heater Load 3 kw, Power On 220/230 Volts A.C. Supply	0	0	0	0	0	0	0	Not Quoted	40	0	0	0	4	4	48	SL/H CHINA	40	0	5	0	4	0	49	DZ-52 ZHONGZHOU China
13	Analytical balance 210g x 0.1mg	0	0	0	0	0	0	0	Not Quoted	40	0	0	0	4	4	48	303 CHINA	40	0	5	0	4	0	49	FA-2104N
14	Digital Drying Oven 100 Liters, 200°C Temperature	40	0	5	0	4	4	53	China Jinhua	40	0	0	0	4	4	48	108L CHINA	40	0	5	0	4	0	49	DGG-9140A
15	Miscellaneous glassware including test tubes, cylinders, pipettes, burettes etc.	0	0	0	0	0	0	0	Not Quoted	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	0	49	ZHONGZHOU China
16	BOD bottles (300 ml)	0	0	0	0	0	0	0	Not Quoted	40	0	0	0	4	4	48	GLASS	40	0	5	0	4	0	49	GG-17
17	Reagent Bottles 1000 ml, 500 ml)	0	0	0	0	0	0	0	Not Quoted	40	0	0	0	4	4	48	GLASS	40	0	5	0	4	0	49	ZHONGZHOU China

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COMPARATIVE STATEMENT FOR PROJECT:193198- INTRODUCTION OF B.TECH PROGRAM AT GOVT. COLLEGE OF TECHNOLOGY KHAR DISTRICT BAJAUR

DATE OF TENDER OPENING 09-03-2022

CIVIL TECHNOLOGY (CONCRETE LAB)

Item No.	Name of Items	Smart Tech Multan							Anmol Scientific, Lahore							Ali Trading Peshawar							KBL Lahore											
		C.S		P.C		P.L.P		T	Model	C.S		P.C		P.L.P		T	Model	C.S		P.C		P.L.P		T	Model	C.S		P.C		P.L.P		T	Model	
		40	5	5	2	4	4	60		40	5	5	2	4	4	60		40	5	5	2	4	4	60		40	5	5	2	4	4	60		
1	Crack detection Microscope Magnification: 40x, measuring range: 4 mm divisions: 0.02 mm, with an adjustable light source fed by high power batteries(included).	40	0	0	0	4	4	48	UTC-3150	40	0	0	0	4	4	48	ASC-P9 PAK	0	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	UTC-3150 Turkey
2	Compaction Factor Apparatus BS 1881 This test gives an accurate indication of the workability of concrete. It is particularly suitable for mixes with limited workability that have aggregates with max. 38 mm diameters. The equipment consists of two conical hoppers with quick opening traps that allow the concrete to fall freely. A specimen mould, mounted on the base, receives the mix.	40	0	5	0	2	4	51	Pakistan Model: SMT-SCF- 0474	40	0	0	0	4	4	48	ASC-L9 PAK	40	0	5	2	4	3	54	ATC-127	40	0	5	0	4	4	53	KBL	
3	Concrete vibrating table 80 x 40 cm EN 12390-2 To facilitate compaction of concrete in the moulds. Vibrating surface 80 x 40 cm with rubber mat, electric vibrator 3.000 vibrations per minute. Pedal switch to start/stop vibration.	40	0	5	0	4	4	53	Pakistan Model: SMT-SCV- 1540	40	0	0	0	4	4	48	AN-9908 PAK	40	0	5	2	4	3	54	ATC-86	40	0	5	0	4	4	53	KBL	
4	Concrete Mixer The steel drum has an integral ring gear and is mounted on a steel frame. Drum liters 140, Yield liters 80, Motor kW 0.3	40	0	5	0	4	4	53	Pakistan Model: SMT-SEMC034	0	0	0	0	0	0	0	Rejected Not as per Specification	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	Jinhua China	
5	Temperature controlled curing tank ASTM C 31 ASTM C 192 AASHTO T 23 EN 12390-2 610 liter, The tank be built with reinforced base. Supplied complete with specimen supporting rack. Control unit with digital thermos-regulator (0.1°C) and temperature setting for heating function only (from ambient to 100°C).	40	0	5	0	0	4	49	Pakistan Model: SMT-SET- 1542	40	0	0	0	4	4	48	AN-448 PAK	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	KBL	
6	Oven Oven 100 liters, 200oC Temperature Natural convection.	0	0	0	0	0	0	0	Rejected Not as per Specification	40	0	0	0	4	4	48	ASC-667 PAK	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	Jinhua China	
7	Heavy duty digital balance (300 kg) Platform : 60 x 45 cm. Zeroing or calibrating key.	0	0	0	0	0	0	0	Not Quoted	40	0	0	0	4	4	48	ASC-U-8 PAK	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	KBL	

8	Air Entrainment Meter ASTM C 231 EN 12350-7 Used to determine the air content of fresh concrete, it comprises a sealed vessel of 5 liter capacity. Lid with fast-closing system incorporates a pressure gauge (0-2.5 bar). Range of measurement 0-10%. Graduated scale (0.1% divisions). With tamping rod and air pump. Supplied with calibration certificate.	40	0	0	0	0	4	44	Model Nil	40	0	0	0	4	4	48	AN-7878 PAK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	KBL
9	Compressometer/Extensometer for 6"x12" Cylinder-Digital Indicator. ASTM C469 Built with lightweight aluminum alloy yokes; other parts with plated steel. Two digital Indicators measuring specimen deformation at the two opposite positions and the transverse deformation simultaneously.	40	0	5	0	0	4	49	CANGZHOU LOVELY TECHNOLOGY CO., LTD. Origin: China Model: LC-510	40	0	0	0	4	4	48	AN-88224 PAK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	KBL
10	Vicats apparatus ASTM C 187, ASTM C 191, AASHTO T129, AASHTO T 131, BS 4550,AFNOR P15, AFNOR P 414,EN 196-3 Metallic Frame, measurement of the movement is given by an indicator which moves along a scale graduated in millimetres. The apparatus is supplied complete with glass plate , needle and mould. ASTM/AASHTO needle dia. 1 mm (set of 6) ASTM/AASHTO cone shaped mould in plastic diameter 70 and 60 mm x 40 (h) mm Glass plate, 10 x 10 cm (Approx) Consistency plunger, dia. 10 mm Thermometer (-10 + 50°C) 300 g consistency plunger (dia. 10 mm)	40	0	5	0	4	4	53	T-1004	40	0	0	0	4	4	48	AN-CE-897 PAK	40	0	5	2	0	3	50	ATC-75	40	0	5	0	4	4	53	KBL							
11	Digital Balance 6 Kg x 0.1 g	40	0	0	0	0	4	44	Model Nil	40	0	0	0	4	4	48	ASC-32 PAK	40	0	0	2	0	3	45	China	40	0	5	0	4	4	53	Jinhua China							
12	Moulds Cube 15 cm/side EN 12390-1 ASTM C 31 ASTM C 192 BS 1881 DIN 51229 NF 18-400	40	0	5	0	4	4	53	Pakistan Model: SMT-SCM-251	40	0	0	0	4	4	48	AN-776 PAK	40	0	0	2	4	3	49	Local	40	0	5	0	4	4	53	KBL							
13	Moulds Cube 5 cm/side EN 12390-1 ASTM C 31 ASTM C 192 BS 1881 DIN 51229 NF 18-400	40	0	5	0	4	4	53	Pakistan Model: SMT-SCM-249	40	0	0	0	4	4	48	AN7-5	40	0	0	2	0	3	45	Local	40	0	5	0	4	4	53	KBL							
14	Moulds Cylinder 15 cm x 30 cm EN 12390-1 ASTM C 31 ASTM C 192 BS 1881 DIN 51229 NF 18-400	40	0	5	0	4	4	53	Pakistan Model: SMT-SCC-261	40	0	0	0	4	4	48	AN-009 PAK	40	0	0	2	0	3	45	Local	40	0	5	0	4	4	53	KBL							
15	Capping Apparatus for 15 cm Side EN 12390-3 ASTM C 617 ASTM C 192 AASHTO T 23 AASHTO T 126 AFNOR P 416 BS 1881 UNI 6132-72 Complete set. Heating power selection. Stainless steel cup with a capacity of approximately two litres. Stainless steel ladle Pliers for handling 15 cm and 6" cylinders	40	0	5	0	4	4	53	Pakistan Model: SMT-SCA-578	40	0	0	0	4	4	48	AC-989 PAK	0	0	0	0	0	0	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	KBL	

16	ASTM Sieve Set (No. 4, 6, 8, 10, 12, 14, 16, 20, 30, 40, 50, 60, 70, 100 and 200)Frame diameter: 8 inch	40	0	5	0	4	4	53	Smart Tech SMT-SST-0025	40	0	0	0	4	4	48	SA-78 PAK	40	0	0	2	4	3	49	Local	0	0	0	0	0	0	0	0	Not Quoted
17	Slump Cone Test Set ASTM C 143, AASHTO T 119, EN 12350-2, BS 1881, BS 5075, NF 18-305 Complete unit Stainless Steel slump cone, plastic scoop, metal funnel to assist filling. Galvanized steel base with graduated rod and strip for scraping and measuring.	40	0	5	0	4	4	53	Pakistan Model: SMT-SSC-066	40	0	0	0	4	4	48	AN-555 PAK	40	0	0	2	4	3	49	Local	40	0	5	0	4	4	53	KBL	
18	Soundness Test Water Bath EN 196-3 Made of stainless steel with bath dimensions 300 x 150 x 190 (h) mm supplied with cover. Control switch, timer (0 ÷ 60 min.) are in the front panel. Temperature: 100°C. Two heating elements, 1350 W and 200 W, guarantee that the water reaches boiling point within approx. 30 minutes, after which a timer cuts out the more powerful element so that the task of maintaining the water temperature is left to the second heating element. Removable rack for 12 moulds.	40	0	5	0	4	4	53	Pakistan Model: SMT-SWB-3081	40	0	0	0	4	4	48	AN-YU-8 PAK	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	0	4	49	KBL	
19	Le-Chatlier Mould AFNOR P 15 AFNOR P 432 EN 196-3 BS 890 BS 4550 Made of chrome plated brass with split cylinder diameter 30 mm x 30 mm high and two needles 150 mm long. Three moulds required for each test.	40	0	5	0	4	4	53	Pakistan Model: SMT-LCM-3078	40	0	0	0	4	4	48	AN-YR-7 PAK	40	0	0	2	4	3	49	Local	0	0	0	0	0	0	0	Rejected Not as peer Specification	
20	Sieve Shaker Electromagnetic UNI EN 932-5 ISO 3310-1 Houses up to 12 sieves diameter 200 mm plus pan and cover or 10 sieves diameter 300 mm plus pan and cover. Timer from 0 to 20 minutes. Variable vibration intensity Adjustable sieving modes: continuous or intermittent. Sieving duration and pauses are programmable.	40	0	5	0	0	4	49	CANGZHOU LOVELY TECHNOLOGY CO., LTD. Origin: China Model: ZDSX-92B	0	0	0	0	0	0	0	Rejected Not as peer Specification	0	0	0	0	0	0	Not Quoted	0	0	0	0	0	0	0	Not Quoted		
21	Aggregate impact apparatus BS 812-112 Used to determine aggregate impact value. Free fall of hammer during tests and built-in blow counter. Complete with cylindrical measure dia. 75 x 50 mm deep and steel tamping bar dia. 16 mm x 600 mm long.	40	0	5	0	4	4	53	Origin: Pakistan Model: SMT-SIV-252	40	0	0	0	4	4	48	AN-BS PAK	40	0	5	2	4	3	54	ATC-132	40	0	5	0	4	4	53	KBL	
22	Blaine apparatus ASTM C 204 AASHTO T 153 BS 4359 AFNOR P 15 AFNOR P 442 BS 4550 EN 196-6 For determining the fineness of Portland cement in terms of a specific surface expressed as total area in cm ² /g of cement. Complete with cell, disk and accessories (thermometer, 1000 filter disks, 100 cc of manometer liquid, silica grease, funnel and brush).	40	0	5	0	4	4	53	Pakistan Model: SMT-SBP-00971	40	0	0	0	4	4	48	AN-990-CE PAK	40	0	0	2	0	3	45	Local with China Parts	40	0	5	0	4	4	53	KBL	

23	Le-Chattier Flask ASTM C 188 AASHTO T 133 EN 196-6 Used to determine the specific gravity of sands and cement. Made in glass, 250 cc capacity. Graduated from 0-1 cc and from 18 to 24 cc (0.1 cc graduations). With ground glass stopper.	40	0	5	0	4	4	53	SMT Pakistan	40	0	0	0	4	4	48	AN-196-6 PAK	40	0	0	2	4	3	49	China	40	0	0	0	4	4	48	KBL
24	Specific Gravity apparatus ASTM C 128 BS 812 en 1097-6 Glass Pycnometer for sands and fine aggregates, 1000 cc capacity with conical top. Sand Absorption Cone and Tamper For fine aggregates. Chrome-plated brass cone (dia. 40 and 90 mm); 25 mm dia. tamping rod. Wire Basket for sample Made of ASTM N.100 Mesh (0.15 mm) 140 mm diameter, 150 mm height	40	0	5	0	4	4	53	Pakistan Model: SMT-SGF- 254	40	0	0	0	4	4	48	AN-NY-98 PAK	40	0	0	2	4	3	49	Local	40	0	5	0	4	4	53	KBL
25	Cone Penetrometer apparatus Simple and light instrument for measuring static penetration resistance. 3 cones with 30° cone angle and 1 sq. inch sectional area 3 threaded extension rods 300 mm long graduated every 150 mm 1 kN (100 kgf) load ring with stem brake unit for max. force reading and dial gauge (0.001 mm resolution) Supplied with calibration certificate and conversion charts and carrying case	40	0	5	0	4	4	53	Pakistan Model: SMT-SMP- 298	40	0	0	0	4	4	48	AN-450 PAK	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	KBL
26	Concrete Permeability Apparatus BS 1881 Complete pressure head, clamping pliers and anchoring tools, two bottles of distilled water. The pressure head is clamped to the concrete surface either horizontally or vertically and is filled with water, sealed and then adequate pressure is applied. The pressure may be chosen between 0 and 4 bar. Readings on the gauge are effectuated at pre-established intervals	0	0	0	0	0	0	0	Not Quoted	40	0	0	0	4	4	48	ANY-7 PAK	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	KBL
27	Blaine Permeability Apparatus ASTM C 204 AASHTO T 153 BS 4359 AFNOR P15 AFNOR P442 BS 4550 EN 196-6 For determining the fineness of Portland cement in terms of a specific surface expressed as total area in cm ² /g of cement. Complete with cell, disk and accessories thermometer, 1000 filter disks, 100 cc of manometer liquid, silica grease, funnel and brush.	40	0	5	0	4	4	53	Pakistan Model: SMT-SBP- 00971	40	0	0	0	4	4	48	AN-990-CE PAK	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	KBL
28	Glass ware(set) Complete with measuring cylinders (1000ml, 500ml, 250ml, 100ml), pycnometers (1000ml, 500ml, 250ml, 100ml), beakers (1000ml, 500ml, 250ml, 100ml),	40	0	0	0	4	4	48	Pyrex Pakistan	40	0	0	0	4	4	48	CHINA	40	0	0	2	4	3	49	China	40	0	0	0	4	4	48	KBL
29	Wood moisture meter Minimum Depth of Measurement: 3/4" Moisture Content range: 5% – 32% Specific Gravity range of selectable wood species: 0.30-0.70	40	0	0	0	4	4	48	UNI-T China Model: UT377A	40	0	0	0	4	4	48	ASC-009 PAK	0	0	0	0	0	0	0	Not Quoted	0	0	0	0	0	0	0	Not Quoted

Engr: Muhammad Adeel Khan, _____
Assistant Professor, (Civil) GTTC Hayatabad Peshawar

Engr, Muhammad Sohail _____
Lecturer (Civil) GCT Bajaur

COMPARATIVE STATEMENT FOR PROJECT:193198- INTRODUCTION OF B.TECH PROGRAM AT GOVT. COLLEGE OF TECHNOLOGY KHAR DISTRICT BAJAUR

DATE OF TENDER OPENING 09-03-2022

CIVIL TECHNOLOGY (SURVEYING LAB)

Item No.	Name of Items	Sunder Trading Co, Lahore							Meditron Peshawar							Chaudhary Brothers, Rewalpindi							Ali Trading Co, Peshawar											
		C.S		P.C		P.L.P		T	Model	C.S		P.C		P.L.P		T	Model	C.S		P.C		P.L.P		T	Model	C.S		P.C		P.L.P		T	Model	
		40	5	5	2	4	4	60		40	5	5	2	4	4	60		40	5	5	2	4	4	60		40	5	5	2	4	4	60		
1	Alidade brass 18"	40	0	5	0	4	2	51	Local	0	0	0	0	0	0	0	Not Quoted	40	0	0	0	0	4	4	44	Local	40	0	0	2	0	3	45	Local
2	Alidade brass 12"	40	0	5	0	4	2	51	Local	0	0	0	0	0	0	Not Quoted	40	0	0	0	0	4	4	44	Local	40	0	0	2	0	3	45	Local	
3	Telescopic Alidade, with erect image magnification 8 to 12X with board tripod compass etc...complete set.	40	3	0	0	4	2	49	DP-7 China	0	0	0	0	0	0	Not Quoted	40	0	0	0	0	4	4	44	DP-07	0	0	0	0	0	0	0	Not Quoted	
4	Chains 100 ft	40	0	5	0	0	2	47	Local	0	0	0	0	0	0	Not Quoted	40	0	0	0	4	4	4	48	Local	40	0	0	2	0	3	45	Local	
5	Compass (Prismatic) 125mm dia with telescopic stand, cover and casing.	36	0	5	0	4	2	47	Local	0	0	0	0	0	0	Not Quoted	40	0	0	0	0	4	4	44	Local	40	0	0	2	0	3	45	China	
6	Compass (Surveyors) 1 degree resolution and 1/2 degree accuracy. 125mm dia with telescopic stand, cover and casing.	36	0	0	0	4	2	42	QDQL-122 China	36	0	5	2	4	4	51	DQL-162 Harbin China	40	0	0	0	4	4	48	Local	0	0	0	0	0	0	0	Not Quoted	
7	Hand level Stadia ratio of 1:32, expendable from 5"-7" .With leather case	40	0	0	0	4	2	46	China	0	0	0	0	0	0	Not Quoted	37	0	0	0	0	4	4	41	Local	40	0	0	2	0	3	45	China	
8	Automatic Level, magnification 32X, air damped technology, minimum focusing distance 0.6m accuracy at 1km double run leveling 2mm or batter. Setting accuracy + 15' water and dust proof complete in case with standard accessories tripod and staff rod.	36	0	5	0	4	2	47	SL-C-32 Sanding China	40	0	0	2	4	4	50	KR-5725 USA	40	0	0	0	0	4	44	XAL-32	40	0	0	2	0	3	45	China	
9	Tilting Level with erect image magnification 32X (U bubble type)	40	0	5	0	4	4	53	HT-32 China	0	0	0	0	0	0	Not Quoted	40	0	0	0	0	4	44	China	0	0	0	0	0	0	0	Not Quoted		
10	Reflector less Total Station Accuracy 5 second, 1 second reading double side display, GRAPHICAL DISPLAY both side screen. Range without prism 500 meters and with prism 3000 meters, memory 60,000 points, SD memory card, magnification 30X, aperture 45mm, laser plummet, electronic bubble and tube bubble in main body, with following surveying program (RDM, reference point distance, MLM, area, stake out, point coordinates, circle radius, Liner arc intersection, road design, point to line, rectangular coordinate, VPM, COGO function) complete in case with standard accessories, aluminum tripod, single prism target set, with triple prism target set with optical plummet and its tripod	40	0	5	0	4	2	51	ARC-7 China Sanding	40	0	0	0	0	0	Not Quoted	40	0	0	0	0	4	44	RTS-100 China	40	0	0	0	0	0	0	Not Quoted		
11	Optical squares (Stanley) double pattern	40	0	0	0	4	2	46	DJ-2 China	40	0	0	2	4	4	50	Model Nil	40	0	0	0	0	4	44	Local	40	0	0	2	0	3	45	Local	
12	Plane table (30" X 24")	40	5	5	0	0	2	52	Local	0	0	0	0	0	0	Not Quoted	40	0	0	0	0	4	44	Local	40	0	0	2	0	3	45	Local		
13	Planimeter digital Roller-type, 10 ft x 1 ft HV measuring range, Accuracy better than +/- 0.2%, Measures to scale, Custom X and Y scale coordinates. Measures regular/irregular/elongated areas, Converts between U.S. and metric	40	0	0	0	4	2	46	QCJ-2000 China	40	0	0	2	4	4	50	China	0	0	0	0	0	0	0	Rejected Not as per Specification	0	0	0	0	0	0	0	Not Quoted	
14	Staves leveling staff (aluminum)	40	0	0	0	0	2	42	China	0	0	0	0	0	0	Not Quoted	40	0	0	0	0	4	44	Local	40	0	0	2	0	3	45	China		
15	Tape thermometer	0	0	0	0	0	0	0	Not Quoted	0	0	0	0	0	0	Not Quoted	40	0	0	0	0	4	44	China	40	0	0	2	0	3	45	China		
16	Tension handles	0	0	0	0	0	0	0	Not Quoted	0	0	0	0	0	0	Not Quoted	0	0	0	0	0	0	0	Not Quoted	0	0	0	0	0	0	0	Not Quoted		

17	Altimeters in leather case	0	0	0	0	0	0	0	0	Not Quoted	0	0	0	0	0	0	0	0	Not Quoted	40	0	0	0	4	4	48	China	0	0	0	0	0	0	0	Not Quoted
18	Tapes 30 m/100ft	0	0	0	0	0	0	0	0	Not Quoted	0	0	0	0	0	0	0	0	Not Quoted	40	0	0	0	0	4	44	China	40	0	0	2	0	3	45	Local
19	Misc. tools and accessories like screw drives, hammers etc.	0	0	0	0	0	0	0	0	Not Quoted	0	0	0	0	0	0	0	0	Not Quoted	0	0	0	0	0	0	0	Not Quoted	0	0	0	0	0	0	0	Not Quoted
Engr: Muhammad Adeel, _____ Assistant Professor, (Civil) GTTC Hayatabad Peshawar										Engr, Muhammad Sohail _____ Lecturer GCT Bajaur (Civil) GPI, Sardar Ghari Peshawar																									

COMPARATIVE STATEMENT FOR PROJECT:193198- INTRODUCTION OF B.TECH PROGRAM AT GOVT. COLLEGE OF TECHNOLOGY KHAR DISTRICT BAJAUR

DATE OF TENDER OPENING 09-03-2022

CIVIL TECHNOLOGY (Geotechnical Lab)

Item No.	Name of Items	Smart Tech Multan							Anmol Scientific, Lahore							Ali Trading Co, Peshawar							KBL Lahore										
		C.S		P.C		P.L.P		T	Model	C.S		P.C		P.L.P		T	Model	C.S		P.C		P.L.P		T	Model	C.S		P.C		P.L.P		T	Model
		40	5	5	2	4	4	60		40	5	5	2	4	4	60		40	5	5	2	4	4	60		40	5	5	2	4	4	60	
1	Liquid Limit Set ASTM D 4318 A ASHTO T 89 UNI 10014 BS 1377 With ebonite base and removable brass cup. The height of drop of the cup may be adjusted via the hand crank mechanism. A built-in blow counter is supplied as standard. Grooving Tool AASHTO -UNI	40	0	5	0	4	4	53	Pakistan Model: SMT-SCG-201	40	0	5	0	4	4	53	AN-501 PAK	40	0	5	2	4	4	60	ATC-104	40	0	5	0	4	4	53	KBL
2	Sand cone with plate ASTM D 1556 AASHTO T 191 CNR 22 1972 Cone 165 mm diameter made of chromium-plated, accurately machined, steel and with a calibrated valve (12.70 mm dia. hole). Aluminium casting base and 5 litre plastic container provided	40	0	5	0	4	4	53	Pakistan Model: SMT-SSC-564	40	0	5	0	4	4	53	AN-502 PAK	40	0	0	2	0	3	45	Local	40	0	5	0	4	4	53	KBL
3	Hydrometer (Practical size sedimentation Set) ASTM D 422 BS 1377 Thermostatic glass bath is divided into two compartments, the first measures 49 x 29 x 30 (h) cm and is where the sedimentation cylinders are placed, the second is smaller and houses the heater and the circulation pump. The heater is preset to maintain a temperature of 20 ± 1°C if the ambient temperature is lower than 20°C. Soil hydrometer type 152 H (ASTM, AASHTO) Range, - 5 to + 60. Lead ballasted with graduated stem (1 g divisions), 1000 cc graduated glass cylinder (5 Required) Graduated glass beaker, 600 cc. Sodium hexametaphosphate, 1 kg	40	0	5	0	4	4	53	Pakistan Model: SMT-SH-152	40	0	5	0	4	49	AN-503 PAK	0	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	KBL
4	High speed stirrer Made of Aluminum casting, complete with a removable stainless steel dispersion cup. Speed: 10,000 rpm	40	0	5	0	4	4	53	Pakistan Model: SMT-SHS-153	40	0	5	0	4	4	53	AN-504 PAK	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	Jinhua China
5	Digital Drying Oven 100 Liters, 200°C Temperature	40	0	5	0	0	4	49	ANGZHOU LOVELY TECHNOLOGY CO., LTD. Origin:China	40	0	5	0	4	4	53	AN-505 PAK	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	Jinhua China
6	Heavy Duty Solution Balance 20 kg, divisions 1 g Stainless steel plate dia. 279 mm. Magnetic damping system. Front beam scale 100 g (divisions 1 g) Rear beam scale 1000 g (divisions 100 g) Tare beam with sliding weight to 2270 g Weight set: 1 x 1 kg, 2 x 2 kg, 1 x 5 kg and 1 x 10 kg A hook can be positioned under the platform for hydrostatic weighing.	0	0	0	0	0	0	0	Rejected Not as per Specification	40	0	5	0	4	4	53	AN-506 PAK	40	0	0	2	0	3	45	China	40	0	5	0	4	4	53	KBL
7	Digital Balance 6 Kg x 0.1 g	40	0	5	0	0	4	49	Not Quoted	40	0	0	0	4	4	48	AN-507 PAK	40	0	0	2	0	3	45	China	40	0	5	0	4	4	53	Jinhua China
8	Digital Balance 1 Kg x 0.01 g	40	0	5	0	0	4	49	Not Quoted	40	0	5	0	4	4	53	AN-508 PAK	40	0	0	2	0	3	45	China	40	0	5	0	4	4	53	Jinhua China

9	Unconfined Testing Machine ASTM D 1883 AASHTO T 193 UNI 10009 Testing Machine, 50 kN machine consists in its 6 speeds (pre-set and ranging from 0.6 to 50.8 mm/min.). Speed change is made via keypad. It is possible to set intermediate speeds other than those already pre-set.Max Vertical Span 600 mm, Min Vertical Span 100 mm Horizontal Span 380 mm Ram travel 100 mm 2kNProving Ring with Calibration CertificateDial Gauge Precision 0.01mm travel 30mm. Load Transmission DeviceBracket for Dial GaugeDial Gauge Datum Bar for Unconfined TestCompression Platen for Unconfined Test	40	0	5	0	0	4	49	Not Quoted	40	0	5	0	4	4	53	AN-509 PAK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	KBL									
10	Direct shear machine ASTM D 3080 BS 1377:7 UNI CEN ISO/TS 17892-10 For 60 cm/side specimen, Variable speed from 0.00001 to 12 mm/min, Max force: 6 kN, All made in stainless steel. Sample cutter 6x6 cm, INOX, Calibrated weights 31.5kg, Brass made shear box 6x6 cm with silicon carbide porous discs. Bidirectional Load Cells of 5 kN capacity, 2 Potentiometric displacement transducers of 25 mm travel, Individual digital display unit of every parameter, Multiplexer with 3-way connector block and window based data acquisition program and processing software for Direct and Residual shear, Different speeds may be selected for forward and reverse drive, Displacement movements: 0.03 µm, Rapid approach speed (unloaded): 12 mm/min, Forward/reverse cycles: programmable up to 20 mm, Number of cycles: no limit to number which may be programmed, Microswitches prevent piston overtravel and dynamometer overload, Leverage system allows applied weights to be amplified by 10, 9, 7.92 and 6.125, A small handwheel serves to sustain/release the vertical load	40	0	5	0	0	4	49	CANGZHOU LOVELY TECHNOLOGY CO., LTD. Origin: China Model: ZJ-1B	0	0	0	0	0	0	0	Rejected Not as per Specification	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Not Quoted										
11	Glass ware Set Complete with measuring cylinders (1000ml, 500ml, 250ml, 100ml), pycnometers (1000ml, 500ml, 250ml, 100ml), beakers (1000ml, 500ml, 250ml, 100ml),	40	0	0	0	4	4	48	Pyrex Pakistan	40	0	5	0	4	4	53	AN-510 PAK	40	0	0	2	0	3	45	China	40	0	5	0	2	4	51	KBL																		
12	Sieve Shaker Electromagnetic UNI EN 932-5 ISO 3310-1 Houses up to 12 sieves diameter 200 mm plus pan and cover or 10 sieves diameter 300 mm plus pan and cover. Timer from 0 to 20 minute. Variable vibration intensity Adjustable sieving modes: continuous or intermittent. Sieving duration and pauses are programmable.	40	0	5	0	0	4	49	CANGZHOU LOVELY TECHNOLOGY CO., LTD. Origin: China Model:ZDSX-92B	40	0	0	0	4	4	48	SV-001- Impact UK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Not Quoted									
13	Standard Moisture Tester ASTM D 4944 BS 812 Supplied in a wooden case complete with balance, 4 steel balls to crush sample, tool kit, Tin of calcium carbide, 3 ampoules for dial gauge checking. Choice of sample weight depends on expected moisture. Capacity: samples weighing from 20 to 100 g. Analogical dial gauge (1.6% accuracy). Moisture range: 0 - 1.6 bar.	40	0	0	0	2	4	46	Not Quoted	40	0	5	0	4	4	53	AN-512 PAK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Not Quoted									
14	Blaine Air permeability apparatus ASTM C 204 AASHTO T 153 BS 4359 AFNOR P15 AFNOR P442 BS 4550 EN 196-6 For determining the fineness of Portland cement in terms of a specific surface expressed as total area in cm2/g of cement. Complete with cell, disk and accessories thermometer, 1000 filter disks,100 cc of manometer liquid, silica grease, funnel and brush.	40	0	5	0	4	4	53	Pakistan Model: SMT-SBP-00971	40	0	5	0	4	4	53	AN-513 PAK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	KBL

15	Oedometer Consolidation Apparatus (3 Place) ASTM D 2435, ASTM D 4546, BS 1377, UNI CEN ISO/TS 17892-5 Oedometer, Fixed Fulcrum (3 Required) Load capacity 160 kg on the lever arm, The lever arm adjustment is achieved by means of a screw pin located on the load bridge, Frame and lever arm made of special heat-treated cast aluminum, Load transmission elements made of steel, Lever arm/reaction pin with roller bearings, Articulation of load bridge/plunger with spherical matching, Lever arm counterweight with screw adjustment, Weight hanger with two support plates, Lever arm with triple beam ratios 9/1, 10/1, 11/1, Lever arm release system with screw and adjusting ring nut, Dial gauge/transducer support, Bubble level fitted to check horizontal leveling of lever arm and Weight: 22.5 kg. Consolidation Cell, 20 cm2 Section 50.47mm Diameter Specimen (3 Required) Calibrated Weights - 64 kg (3 Required) Dial Gauge, 10mm Travel (3 Required). Three Place Bench Steel Made, Suitable for 3 Oedometers	40	0	5	0	0	4	49	CANGZHOU LOVELY TECHNOLOGY CO., LTD. Origin: China Model: WG1B	40	0	5	0	4	4	53	AN-514 PAK	0	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	KBL
16	Standard Compaction Hammer and Mould ASTM D 558 ASTM D 698 ASTM D 1557 AASHTO T 99 AASHTO T 134 AASHTO T 180	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	AN-515 PAK	40	0	0	2	0	3	45	Local	40	0	5	0	4	4	53	KBL	
17	ASTM Sieve Set (No. 4, 6, 8, 10, 12, 14, 16, 20, 30, 40, 50, 60, 70, 100 and 200)Frame diameter: 8 inch	40	0	5	0	4	4	53	Smart Tech Pakistan	40	0	5	0	4	4	53	AN-516 PAK	40	0	0	2	4	3	49	Local	0	0	0	0	0	0	0	Not Quoted	
18	Standard Penetration Test apparatus AASHTO T 206, ASTM D1586 compliant equipment. Split Barrel Sampler, hardened machined steel, 1-3/8" inner dia; 18" length(1 pc). Sampling Rod; steel pipe, 1.5 m length. (20 pcs) Vertical Guide; machine steel (1 pc) Pipe Wrench; 24 "length (2 pcs) Drive weight Assembly consisting of: Hammer; steel, 63.5 kg weight (1 pc) Anvil; machine steel (1 pc) Guide Rod (steel, 76.2 cm drop height (1 pc) Tripod Assembly consisting of: Tripod Stand; steel pipe (1 pc) Pulley; 20 cm diameter (1 pc) Rope; 3/4" diameter x 15 m (1 roll)	40	0	5	0	4	4	53	Pakistan Model: SMT-SPT-1172	40	0	5	0	4	4	53	AN-517 PAK	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	KBL	
19	Plate load test apparatus ASTM D1194, ASTM D1195, ASTM D1196; DIN1834; BS1377 compliant Load plate diameter:300mm Jack with load capacity range:0-300KN And stroke:120 mm Measuring bridge span: 3000mm Hand pump with rated pressure: 70Kpa Stress test range: 0-25Mpa Two displacement gauges with two normal and two magnetic stands and measurement range 30x0.01mm	40	0	5	0	4	4	53	Pakistan Model: SMT-SPL-0879	40	0	5	0	4	4	53	AN-518 PAK	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	KBL	

Engr: Muhammad Adeel Khan, _____
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COMPARATIVE STATEMENT FOR PROJECT:193198- INTRODUCTION OF B.TECH PROGRAM AT GOVT. COLLEGE OF TECHNOLOGY KHAR DISTRICT BAJAUR
DATE OF TENDER OPENING 09-03-2022
CIVIL TECHNOLOGY (MATERIAL TESTING LAB)

Item No.	Name of Items	Smart Tech Multan						Anmol Scientific, Lahore						Ali Trading Co, Peshawar						Electrical Engineering Services, Lahore						KBL Lahore						ESOLS Multan																	
		C.S	P.C	P.L.P	T	Model	C.S	P.C	P.L.P	T	Model	C.S	P.C	P.L.P	T	Model	C.S	P.C	P.L.P	T	Model	C.S	P.C	P.L.P	T	Model	C.S	P.C	P.L.P	T	Model																		
		40	5	5	2	4	4	60	40	5	5	2	4	4	60	40	5	5	2	4	4	60	40	5	5	2	4	4	60	40	5	5	2	4	4	60													
1	Lab Tools including (Digital Vernier calipers, Screw Gauges, Spanner Set, Plier Set, Screw Driver Set, Mallet/Rubber Hammer, Hammer, L-Key Set)	40	0	0	0	4	4	48	Ingco, Pakistan	40	0	0	0	4	4	48	China	40	0	0	2	0	3	45	Local	40	0	0	0	0	4	44	Local	40	0	0	0	0	4	48	KBL	40	0	0	0	0	0	0	Not Quoted
2	Strut Apparatus Basic frame: 2 columns and a sliding cross member with loading screw. Maximum strut length: 750 mm. Load cell: 150 kg. Force indicator: 3 1/2 digits. Dial gauge: 0-20 mm. x 0.01 mm. graduation. Weight hanger and weights: 4 x50 + 2 x 100 + 3 x 200 g. Strut supports: Knife edge: 2 each Built – in: 2 each, Struts specimens:6 each with knife edge ends; 3 x 20mm mild steel. Lengths: 500, 550, 600, 650, 700 and 750 mm. 3 each with knife edge ends: 6 (approx.) x 20 x 750 mm	40	0	5	0	4	4	53	Smart Tech, Pak SMT-SSB-712	40	0	5	0	4	4	53	AN-133	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	0	4	49	SM-1412 EES	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	SMT-SM-06
3	Concrete Core Drill EN 12504-1 A highly practical model with base in die-cast aluminium mounted on two wheels at the rear for ease of movement. The support column is in galvanized steel and may be positioned at different angles up to 70° with respect to the base. Mobile, motor support on ball-bearings, shaft thread is 1 ¼" UNC (31.75 mm) with 7 threads per inch.	40	0	5	0	4	4	53	LOVELY TECHNOLOGY Origin:China Model:255 B2	40	0	5	0	4	4	53	AN-134	0	0	0	0	0	0	0	Not Quoted	0	0	0	0	0	0	0	Not Quoted	40	0	0	0	4	4	48	KBL	0	0	0	0	0	0	0	Not Quoted
4	Charpy s&tizod impact test apparatus ISO 179, ISO 180, ASTM D-6110, ASTM D256 compliant. Digital with touchscreen display and PC interface. Energy levels (max capacity): 5.5J, 11J, 22J (Izod Testing), 7.5J, 15J, 25J, 50J (Charpy Testing) Span of Charpy: 62mm Izod testing Impact Speed: around 3.5m/s Radius of striking edge R=0.8mm±0.2mm Location of striking edge above top surface of support: 22mm±0.05mm Notch A: 45°±1° Radius of the notch bottom R=0.25±0.05mm Notch B: 45°±1° Radius of the notch bottom R=1±0.05mm Charpy testing Impact Speed: 2.9m/s;3.8m/s Radius of striking edge R=2mm±0.5mm Angle of striking edge: 30°±1° Measurement resolution: 0.01J Notch A: 45°±1° Radius of the notch bottom R=0.25±0.05mm; Notch B: 45°±1° Radius of the notch bottom R=1±0.05mm; Notch C: 45°±1° Radius of the notch bottom R=0.25±0.05mm	40	0	5	0	0	4	49	LOVELY TECHNOLOGY Origin: China	40	0	5	0	4	4	53	AN-135	0	0	0	0	0	0	0	Not Quoted	40	0	0	0	0	4	44	Chins XJUUD-50	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	SMT-SM-13
5	Torsion testing Machine Digital Servo Hydraulic type for static, dynamic and fatigue torque ranging from ± 1 Nm to 80 kNm up to maximum 30 Hz frequency.	0	0	0	0	0	0	0	Rejected Not as per Specification	40	0	5	0	4	4	53	AN-136	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	0	4	49	SM-1406	0	0	0	0	0	0	0	Not Quoted	0	0	0	0	0	0	0	Not Quoted
6	Curved bar apparatus Set of calibrated weights (4 x 2N; 3 x 5N; 1 x 10 N) Six specimens: including semi-circle; semi-circular bracket; double davit; quadrant; single davit curved; single davit straight Specimen section approximately 25mm x 3mm, coated steel. Two special hangers for loading and connecting two displacement gauges. Two displacement gauges on moveable stands. Along with Frame and Stand and Comprehensive instruction manual.	40	0	5	0	4	4	53	Smart Tech, Pak SMT-SCB-700	40	0	5	0	4	4	53	AN-137	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	0	4	49	SM-1407	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	SMT-SM-03
7	Beam deflection apparatus A range of beam materials and cross sections. Bench mounted test frame. Should include Three reaction-measuring piers incorporating an electronic load indicator.Fourth pier for clamping the end of a beam or cantilever. Three dial gauges on adjustable stands. Four load hangers. Digital display for viewing of forces and deflections. Along with software and comprehensive technical manual. Set of slotted weights included	0	0	0	0	0	0	0	Rejected Not as per Specification	40	0	5	0	4	4	53	AN-138	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	0	4	49	SM-1404+SM-14045W	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	SMT-SM-01-B

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COMPARATIVE STATEMENT FOR PROJECT:193198- INTRODUCTION OF B.TECH PROGRAM AT GOVT. COLLEGE OF TECHNOLOGY KHAR DISTRICT BAJAUR

DATE OF TENDER OPENING 09-03-2022

CIVIL TECHNOLOGY (TRANSPORTATION LAB)

Item No.	Name of Items	Smart Tech Multan						Anmol Scientific, Lahore						Ali Trading Co, Peshawar						KBL Lahore													
		C.S		P.C		P.L.P		T	Model	C.S		P.C		P.L.P		T	Model	C.S		P.C		P.L.P		T	Model								
		40	5	5	2	4	4	60		40	5	5	2	4	4	60		40	5	5	2	4	4	60									
1	Asphalt mixer machine with EN 12697-35 Complete with bowl and beater. Planetary speeds: 25 - 32 - 39 - 46 - 53 - 60 rpm (clockwise rotation)Beater speeds: 64 - 82 - 100 - 118 - 136 - 154 rpm (anticlockwise rotation. Control panel with heat regulator, electric heating device with heating element	40	0	5	0	4	4	53	CANGZHOU LOVELY TECHNOLOGY CO., LTD. Origin:China Model:BH-20	40	0	5	0	4	4	53	AN-401 PAK	0	0	0	0	0	0	0	Not Quoted	0	0	0	0	0	0	0	Not Quoted
2	CBR moulds with surcharge weight ASTM D 1883 EN 13286-47 BS 1377 AASHTO T 193 CNR UNI 10009 Mould diameter 6" x 7" With collar and perforated base plate. Annular Surcharge 2.27 kg ,Split Surcharge 2.27 kg Annular Surcharge 4.54 kg Annular Surcharge 9.08 kg	40	0	5	0	4	4	53	Pakistan Model: SMT-SSCM-0366	40	0	5	0	4	4	53	AN-402 PAK	40	0	0	2	0	3	45	Local	40	0	5	0	4	4	53	KBL
3	CBR Laboratory Set BS 598, ASTM D 1559, CNR 30, EN 12697-12, EN 12697-34, AASHTO T 245 Testing Machine, 50 kN machine consists in its 6 speeds (pre-set and ranging from 0.6 to 50.8 mm/min.). Speed change is made via keypad. It is possible to set intermediate speeds other than those already pre-set.Max Vertical Span 600 mm, Min Vertical Span 100 mm Horizontal Span 380 mm Ram travel 100 mm Load Transmission Device Dial Gauge, Precision 0.01mm 50 kN Proving Ring Complete with Calibration Certificate Bracket for	0	0	0	0	0	0	0	Rejected Not as per Specification	40	0	5	0	4	4	53	AN-403 PAK	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	KBL
4	Proctor penetrometer ASTM D 1558 Designed for comparative checking of soil compaction. It may also be used for evaluating moisture/density relationship, determined in the laboratory, on an analogous soil sample. Supplied complete with 9 interchangeable needles: 1" - 3/4" - 1/2" - 1/3" - 1/5" - 1/10" - 1/20" - 1/30" - 1/40" and carrying case. Graduations 0-40 kg. (division 1 kg)	40	0	5	0	4	4	53	Pakistan Model: SMT-SPP-042	40	0	5	0	4	4	53	AN-404 PAK	0	0	0	0	0	0	0	Not Quoted	0	0	0	0	0	0	0	Not Quoted
5	Bitumen Flash and Fire point test set	40	0	5	0	4	4	53	Pakistan Model: SMT-SFP-1211	40	0	5	0	4	4	53	AN-405 PAK	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	KBL
6	Bitumen Penetration Grading test set	40	0	5	0	4	4	53	Pakistan Model: SMT-SBP-249	40	0	5	0	4	4	53	AN-407 PAK	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	KBL

7	Bitumen softening point test set	40	0	5	0	4	4	53	Pakistan Model: SMT-BSP-251	40	0	5	0	4	4	53	AN-408 PAK	0	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	KBL
8	Soil Specific Gravity test sets (separate set for fine and for coarse particles/aggregate)	40	0	5	0	4	4	53	Pakistan Model: SMT-SGF-254 (fine) SMT-SGC-255 (coarse)	40	0	5	0	4	4	53	AN-409 PAK	0	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	KBL
9	Digital Viscometer AASHTO T 316 , ASTM D4402 compliant. Viscosity Range 100cP-40 million cP Revolutions per Minute 0.01-200RPM Accuracy ±1% Reproducibility ±0.2% Temperature Range 9°—260°C (40°—500°F) Touch screen digital display. 220v single phase 50Hz power.	0	0	0	0	0	0	0	Rejected Not as per Specification	40	0	5	0	4	4	53	AN-410 PAK	0	0	0	0	0	0	0	0	Not Quoted	0	0	0	0	0	0	0	Not Quoted
10	Hydraulic Sample Ejector Hand-operated with hydraulic jack (3000 kg capacity). For the extrusion of 4" - 6" samples from moulds. Annular and slotted plates for quick set-up. It enables the extrusion of Marshall, Proctor, CBR samples.	40	0	5	0	4	4	53	Pakistan Model: SMT-SSE-0857	40	0	5	0	4	4	53	AN-411 PAK	0	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	53	KBL

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Assistant Professor, (Civil) GTTC Hayatabad Peshawar

Engr, Muhammad Sohail _____
Lecturer (Civil) GCT Bajaur

COMPARATIVE STATEMENT FOR PROJECT:193198- INTRODUCTION OF B.TECH PROGRAM AT GOVT. COLLEGE OF TECHNOLOGY KHAR DISTRICT BAJAUR

DATE OF TENDER OPENING 09-03-2022

CIVIL TECHNOLOGY (Applied Mechanics Lab)

Item No.	Name of Items	Smart Tech Multan						Anmol Scientific, Lahore						Ali Trading Co, Peshawar						Electrical Engineering Services, Lahore						ESOLS Multan																	
		C.S		P.C		P.L.P		T	Model	C.S		P.C		P.L.P		T	Model	C.S		P.C		P.L.P		T	Model	C.S		P.C		P.L.P		T	Model										
		40	5	5	2	4	4	60		40	5	5	2	4	4	60		40	5	5	2	4	4	60		40	5	5	2	4	4	60		40	5	5	2	4	4	60			
1	Reaction of Beam Apparatus The apparatus should consist of a beam of approx 1m length, two linear spring balances, three load hangers, and a bench top mounting unit. Accessories should include: Supporting main frame, 1m ruler along with set of weights and user manuals.	40	0	5	0	4	4	53	SmartTech Origin: Pakistan Model: SMT-SRB-0871	40	0	0	0	4	4	48	ASC-89 PAK	40	0	0	2	4	4	3	49	Local	40	0	5	0	4	4	4	60	SM-1426	40	0	5	0	4	4	53	SMT-MM-19
2	Roof Truss Apparatus The apparatus should consist of two rafter struts and a restraining tie mounted on a self-contained bench top base. Both struts and tie must have built-in linear, direct reading spring balances to measure forces. The tie length, and hence angle of truss be variable. Accessories should include: One load hanger for loading at the hinged apex. Along	40	0	5	0	4	4	53	SmartTech Origin: Pakistan Model: SMT-SRT-0895	40	0	0	0	4	4	48	ASC-07 PAK	0	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	4	53	FF-1102 EES	40	0	5	0	4	4	53	SMT-SM-07
3	Toggle Joint Apparatus The apparatus should consist of two pair of links mounted on a base with one end of the links fixed, a central pivoted joint, and the other end restrained by a spring balance to read the resulting horizontal force. Loading applied at the apex pivot by a weight hanger. Variable toggle angles available, and facility to re-adjust to original state. Along with set of weights and user manuals.	40	0	5	0	4	4	53	SmartTech Origin: Pakistan Model: SMT-STJ-0896	40	0	0	0	4	4	48	ASC-88 PAK	0	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	4	53	FF-1111	40	0	5	0	4	4	53	SMT-MM-23
4	Jib Crane Apparatus The wall mounted crane should consist of a compression jib, and a tension tie which is adjustable, and both incorporate a linear, direct reading spring balance to measure the forces in them. One load hanger to apply loads through the junction of the two members. Set of weights, comprehensive technical manual and set of slotted weights be included.	40	0	5	0	4	4	53	SmartTech Origin: Pakistan Model: SMT-SJC-0846	40	0	0	0	4	4	48	ASC-557 PAK	0	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	4	53	FF-1110	40	0	5	0	4	4	53	SMT-MM-01
5	Bending moment and Shear force apparatus Should consist of 2 simple supports; a rigid Aluminum alloy beam cut into two unequal lengths, with a frictionless hinge at the joint which permits minimal vertical movement, whilst allowing bending. Analogue spring balance measures direct force at the 'cut' section Moment lever arm mechanism allows bending moment to be calculated Multiple load positions achievable To be bench top mounted.	40	0	5	0	4	4	53	SmartTech Origin: Pakistan Model: SMT-BSF-0839	40	0	0	0	4	4	48	ASC-500 PAK	0	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	4	53	SM-1405	40	0	5	0	4	4	53	SMT-MM-07
6	Center of gravity apparatus The apparatus should include a bench mounted unit with a free standing backboard with a pin in it from which a selection of flat shapes can be hung. A simple plumb bob to be suspended from the same pin. 6 shapes; a circle, isosceles triangle, trapezium, L, T and semi-circle to be provided	40	0	5	0	4	4	53	SmartTech Origin: Pakistan Model: SMT-CGA-0859	0	0	0	0	0	0	0	Not Quoted	0	0	0	0	0	0	0	0	Not Quoted	40	0	5	0	4	4	4	53	FF-1104	40	0	5	0	4	4	53	SMT-MM-15
Engr: Muhammad Adeel Khan, Assistant Professor, (Civil) GTTC Hayatabad Peshawar									Engr, Muhammad Sohail Lecturer (Civil) GCT Bajaur																																		

**COMPARATIVE STATEMENT FOR PROJECT:193198- INTRODUCTION OF B.TECH PROGRAM AT GOVT. COLLEGE OF TECHNOLOGY KHAR DISTRICT BAJAUR
DATE OF TENDER OPENING 09-03-2022
CIVIL TECHNOLOGY (CIVIL DRAFTING SHOP)**

Item No.	Name of Items	Ali Trading Co, Peshawar							Model
		C.S		P.C		P.L.P		T	
		40	5	5	2	4	4	60	
1	Drawing Table -Local good quality made Drawing Table Specification: -Top 42"x 30"Height 37"Base constructed of 1"square steel, 18 gauge Designed to allow a 3"overhang at back of base for mounting of drafting machine42"W x 30"D top with pencil ledge Two Ratchet lock mechanisms. Top adjustable 0 to 45 degrees .	40	0	0	2	0	3	45	LOCAL
2	Tee Square Wooden. -Local made. 42"(105cm)Smooth black polish with transparent plastic double edge superior quality.	40	0	0	2	0	3	45	LOCAL
3	Set Square. -Local good quality made 14"(35cm)Set square unbreakable celluloid inch & cm graduation (30-60&45-45) degree.	40	0	0	2	0	3	45	LOCAL

4	Drawing Instrument Set. - Local made /China best quality. -Instruments are held securely in crimson foam molded inserts -Set includes 6-1/2"bow compass, 4-1/2"bow compass, friction divider, pen handle, pen attachment, tube of compass leads and divider points.	40	0	0	2	0	3	45	LOCAL
5	French Curve Set.18cm & 24cm.12 different curves packed in plastic box. - Local good quality made	40	0	0	2	0	3	45	LOCAL
6	Rot ring Variant B Drawing Pens Set of 8 rotring variant B 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 1.2 Local made.	40	0	0	2	0	3	45	LOCAL
7	Draftsman Stool. Wooden Stool 36" height . Local good quality made	40	0	0	2	0	3	45	LOCAL
Engr: Muhammad Adeel Khan, _____ Assistant Professor, (Civil) GTTTC Hayatabad Peshawar		Engr, Muhammad Sohail_____ Lecturer (Civil) GCT Bajaur							