

**Dr. Babasaheb Ambedkar Technological University,**  
P.O. LONERE - 402 103, Tal. Mangaon, Dist. Raigad

Our Ref No. : DBATU/Store/Civil Engg./TRE Lab Equipment/2019/ Date: 24.10.2019

Quotation for : TRE Lab Equipment

Due On: 18.11.2019

Date of Opening: 19.11.2019

Time: 03.00 pm

To,

o/c

**Sub: QUOTATION FOR Transportation Engineering Lab Equipments.**

Dear Sir,

Your quotation for the items listed overleaf, may please be submitted to the under signed, so as to reach this Office not later than 18.11.2019

While submitting your quotation, the following procedure may please be observed and other points borne in mind.

01. The maker's name must be specified.
02. The "Terms and Conditions" for supply and delivery of stores, should be clearly indicated in the quotation, stating whether rates are, inclusive of all taxes, Packing and forwarding charges Freight charges etc. or not, However rates offered as including all taxes will be more welcome.
03. If packing and forwarding charges are to be charged separately, it should be so clearly stated in your quotation.
04. Please mention clearly whether consignment would be Ex-Godown, Ex-Shop, of F.O.R. dispatching stations. Preferably terms offered as "Delivery of consignment of stores, on F.O.R.
05. Envelope should be clearly marked with our reference No and date of this quotation. It should also be superscripted as per the format given above.
06. The quotation would be opened as per date and timing given above, if desired by you, you may depute an authorized representative with a letter of authority to be present at the time of opening of the quotation at this Office on the aforesaid day, date & time.
07. Your quotation must be valid for a minimum 30 ( Thirty ) working days from the date of it's opening.
08. Quotation received after the date of opening may not be taken into consideration.
09. Items tendered should confirm to the specification shown in the attached list when and where, full or no specifications are indicated against items in the list. Kindly furnish your full specification in accordance with accepted standards against each item tendered. Where reference to catalogue is made, the relevant catalogues/ Pamphlets/ Literature should accompany the quotation.
10. Your quotation should be for all new items and not for second hand.
11. Please state whether items will be available Ex-Stock. If not the minimum period for delivery, or for supplying the items or stores.
12. It should be clearly stated whether GST Insurance Freight or packing and forwarding charges, or any other taxes and duties etc. leviable.

13. It would be appreciated if illustrated catalogues/Literature etc is furnished with the quotation.
14. Expression to as "Complete with standard Equipment" complete with standard accessories "Equipment to" As good as should be avoided. If at all their use is unavoidable then it should be very specifically indicated as to what exactly they mean and what exactly would be supplied under them. Any ambiguity or vagueness should be avoided.
15. For convenience, kindly adopt while quoting the same serial Nos. as given in the list detailed below.

Thanking You.

Yours faithfully,

*Handwritten signature*

*Handwritten signature*  
24/10/19

**Registrar**

Dr. Babasaheb Ambedkar Technological University,

*Handwritten signature*  
24/10/2019

*Handwritten signature*

**List of Items**

Sr. No	Description / Specification	Make	Appox. Qty. Req	Rate per Unit	Remark
01	List of the Transportation Laboratory equipments with specifications are attached here with.	-	-	-	-

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**Dr. Babasaheb Ambedkar Technological University Lonere Raigad**

Department of Civil Engineering

List of Transportation Laboratory Equipments

Sr. No	Name of Equipment	Specification	Qty. Required
01	<b>Thickness Gauge, as per IS: 2386 (Part I), 1991</b>	Used to determine Flakiness Index of the aggregate. The aggregate particles are to be flaky, if their thickness is less than 0.6 of their normal size. It consists of a frame with fixed panel with accurate slots of standard width and length, the complete assembly is powder coated / chrome plated. The flakiness test is not applicable to sizes smaller than 6.3mm. The apparatus consists of thickness gauge of IS Sieve sizes - 63mm, 50mm, 40mm, 31.5mm, 25mm, 20mm, 16mm, 12.5mm, 10mm & 6.3mm.	06
02	<b>Length Gauge, as per IS: 2386 (Part I), 1991</b>	Used to determine Elongation Index of the aggregate. Aggregate particles are considered elongated when their length is more than 1.8 of the normal size. It consists of a hard wood base with vertically mounted metal studs as per IS specifications. The elongation test is not applicable to sizes smaller than 6.3mm. The apparatus consists of standard length gauge of IS Sieve sizes - 50mm, 40mm, 25mm, 20mm, 16mm, 12.5mm, 10mm & 6.3mm.	06
03	<b>Table Top Balance</b>	3 Kg/0.01 g	01
04	<b>Table Top Balance</b>	10 Kg/0.01 g	01
05	<b>Test Sieves,</b>	<b>30cm dia, G.I. Frame</b> aperture size - 63mm, 50mm, 40mm, 37.50mm, 31.5mm, 25mm, 22.50mm, 20mm, 16mm, 12.5mm, 10mm, 6.3mm, 4.75mm	02
06	<b>Enamel Tray</b>	Size 300 x 250 mm approx.	02
07	<b>Enamel Tray</b>	Size 450 x 300 mm	02
08	<b>Enamel Tray</b>	Size 600 x 450 mm	02
09	<b>Scoop</b>	made of Mild Steel, Size - 4 x 7.5" approx	02
10	<b>Buoyancy Balance</b>	The Buoyancy Balance consists of a rigid support frame, incorporating a water tank, mounted on the platform. A mechanical lifting device is used to raise the water tank through the frame height hence immersing the specimen suspended below the balance. Fitted with 15 kg capacity x 0.5gm electronic balance & density basket.	01
11	<b>Hot Air Oven (Laboratory type)</b>	Double walled construction inner chamber made of St. Steel & exterior G.I. sheet powder coated. The gap between the two walls filled with glass wool insulation. Temperature controlled by microprocessor based Auto Tune PID digital controller with PT 100 as sensor. Supplied with S.S. Wires mesh shelves. Temperature range: 50 °C to 250 °C Accuracy (± 2 °C). • Chamber Size: 18" x 18" x 18" • Rating Watts: 1750 • No. of Shelves: 03	01

*(Handwritten signatures)*

12	<b>Le Chatelier Flask</b>	Capacity 500ml (for fine aggregate)	2
13	<b>Thermostatically Controlled Water Bath</b>	Constant Temperature Water Bath, (Heating Type) Inner chamber 12 x 10 x 7" made of S.S. Sheet, Outer Body made of M.S. Sheet duly powder coated. Gap between both walls is filled with glass wool. Temperature range 5° above ambient to 95° C.	1
14	<b>Beaker</b>	Low Form, with Spout, Capacity 500ml which material	10
15	<b>Film Stripping Device</b>	To measure the resistance of bituminous mixtures to stripping of asphalt from the rock particles and is generally used to evaluate the mineral aggregate. It consists of a rotating disc at a speed of approximately 100 r.p.m. Disc carries four bottles. Supplied complete with time switch. Suitable for 230 volts, single phase.	01
16	<b>Le-Chatelier Mould, As per IS: 5514.</b>	Used for soundness test of cement. The apparatus consists of a small split cylinder forming a mould of 30mm internal dia. and 30mm high. On either side of the split cylinder, two parallel indicating arms with pointed ends are fixed. The mould is supplied with two glass plates and lead weight. Set of six moulds supplied in a cardboard box.	02
17	<b>Le-Chatelier Water Bath</b>	Inner chamber made of S.S., outer body Mild Steel duly powder coated, gap between both walls is filled with glass wool to avoid heat loss. Temperature is controlled by a precision Thermostat. Temperature range 5° above ambient 100°C ± 2°. Removable rack is provided in the chamber which has been designed to accommodate 6 le-Chatelier moulds. Suitable for operation on 220 volts power supply. Supplied Without Le-Chatelier Moulds.	01
18	<b>Laboratory C.B.R. Apparatus, As per IS: 2720 (Part XVI)</b>	Motorised. It consists of Box Type (Covered Body type) Load frame 50 kN capacity, complete with Mild Steel mould 150mm dia x 175mm high, 2.6 & 4.89 kg mild steel rammer, 2.5 kg annular & slotted weight, Aluminium tripod, Penetration piston, Brass perforated plate with stem and lock nut, cutting collar and Circular spacer disc with detachable handle. Without proving ring & dial gauge	01
19	<b>Dial Gauge</b>	Dial Gauge for above, 0.01 x 25mm	01
20	<b>Brass Cone</b>	For above, if required for penetration test.	01
21	<b>Thermometer</b>	IP 8C (low range) for above, at extra cost	02

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