

# College of Engineering Trivandrum, Thiruvananthapuram

## NOTICE INVITING TENDER

P5/4630/19/CET

27.09.2019

E-Tender ID

**:2019\_DTE\_304075\_1**

Tender No.

**:25/19/P5/CE/QIP**

Superscription

Purchase of permeability test setup, carbonation depth measurement apparatus, heat of hydration apparatus with software and dial gauge for Civil Engineering Department of this institution.

Last date and time of receipt of tender on the website (www.etenders.kerala.gov.in)

: 24/10/2019 3 PM

Date and time of opening of tender

: 26/10/2019 11 AM

Date upto which the rates are to be firm

: 26/04/2020

Bidding fee

: Rs.1770/-(Rs.1500/-+18%GST)

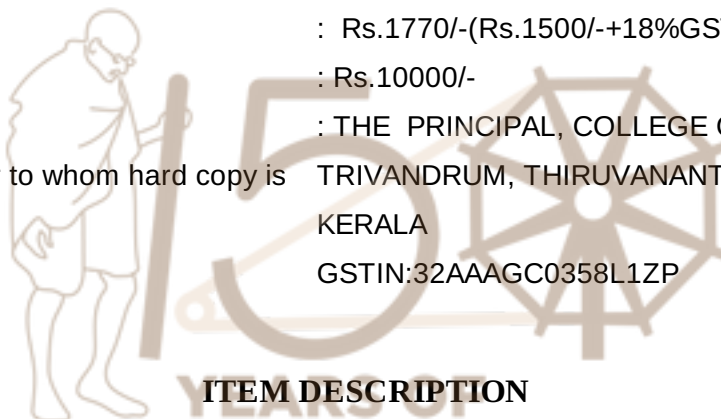
EMD required

: Rs.10000/-

Address of the Officer to whom hard copy is to be send.

: THE PRINCIPAL, COLLEGE OF ENGINEERING TRIVANDRUM, THIRUVANANTHAPURAM-695016, KERALA

GSTIN:32AAAGC0358L1ZP



### ITEM DESCRIPTION

Sl. No.	Item and Specification	Quantity
1	<p><b>Permeability apparatus with compressor</b></p> <p>List of materials:</p> <p>Three cell model</p> <p>To determine permeability of water through cement mortar and concrete specimens of 150mm diameter cubes/cylinders.</p> <p>A mild steel cell of square/round cross-section mounted on a stand and a pressure chamber is connected to the cell through copper tubing and T-connector mounted on the stand with sleeve packed valve and rubber hose pipe with end connections. The cell assembly consists of one base plate and one top plate connected to nozzles. The pressure chamber is fitted with a pressure regulator which helps in regulating the pressure from 0-15kg/cm sq. Gauge is for indicating the water pressure in the cell. Transparent burettes mounted on top of the apparatus. A foot pump and a pressure tube are supplied to develop pressure in the</p>	1

	chamber. A measuring cylinder 500cc to measure percolated quantity to water has to be supplied.	
	<p><b>Carbonation depth measurement apparatus</b></p> <p>List of materials:</p> <p>Hole depth: maximum 40cm</p> <p>Hole diameter: 10mm</p> <p>Phenolphthalein: Sensitivity pH 8.3 to pH 10</p> <p>Dimensions: 390 x 340 x 140 mm</p> <p>Weight approx.: 3 kg</p> <p>Picker to collect the powder. Bottom part of the ring ends in a funnel that direct the powder to the relevant test tube.</p> <p>Styrene acrylonitrile test tubes, 25 nos, 18 cm long and inside passing width of 9 mm.</p>	
2	<p>Measuring ruler with graded notches in cm designed to fit into the hole and to measure powder collected in the test tube.</p> <p>1% of alcoholic solution of phenolphthalein, range between pH 8.3 and pH 10 which determines a colour change to pink of the powder not affected by carbonation.</p> <p>Pasteur pipette to place phenolphthalein along the thin cut of the test tube.</p> <p>Catridge of universal plaster for cement, 250g</p> <p>Block of survey sheets.</p> <p>Software for creating a technical report.</p> <p>Spare kit with 25 test tubes, phenolphthalein solution, 250g catridge of universal plaster has to be supplied</p>	1
3	<p><b>Heat of Hydration with software</b></p> <p>To determine the heat of hydration of a concrete mixture based on the principle of semi - adiabatic calorimetry</p> <p>HeatBox- 600 x 600 x 600 mm insulated box with a central space for a 150 x 300 mm cylinder mold.</p> <p>The system include a 2-channel datalogger and two temperature sensors to measure the concrete temperature and the ambient air temperature.</p> <p>Supplied complete with: Insulated container, 2-channel datalogger, 150 x 300 mm single- use mold, Single-use brass tube, temperature sensors 2 nos., heat of hydration software with help files.</p>	1
4	<p><b>Dial gauge</b></p> <p>Measuring range 0.5mm</p> <p>Least count 0.002mm</p>	1
	Total	

### **Terms and conditions:**

1. Warranty –5 years onsite
2. Supplier should produce the brochure for the equipment
3. Items should be supplied in the Structural Engineering Lab of Civil Engineering Department
4. Equipment should have a proper operating manual
5. Custom duty exemption certificate will be provided

### **General conditions**

- 1.The price quoted should be inclusive of all taxes, freight charges, unloading charges, installation and commissioning charges and should be furnished unambiguously.
- 2.Payment: 100 % after successful supply, installation, commissioning and demonstration.
- 3.Delivery Period: Maximum Delivery period will be 60 days from the date of receipt of supply order.
- 4.Agreement as per NIT 2 in Rs.200/- Kerala Stamp Paper and tender form should be uploaded.
- 5.5% security deposit along with agreement should be furnished within a month/fortnight from the date of receipt of supply order.
- 6.Date of opening of tender: In case the proposed date declared as holiday, the tender will be opened on the next working day.
- 7.After E-Tendering the hard copy of all documents such as agreement, brochure,tender form should be submitted before the opening date.
- 8.Only GST registered firms can participate in the Tender.The firm under composition scheme must mention the words "Composition taxable person" in their quotation and should submit proof for that.
- 9.Necessary brochure should be attached.
- 10.No loading,unloading,transportation charges are allowed. the item should be installed/erected and demonstrated,if needed, free of cost.
- 11.The items should be delivered at the door,no loading,unloading,transporting charges etc. are allowed.
- 12.Copy of the order exempting EMD,tender cost etc.should be forwarded before opening date.

NB: The Tender procedure will be made as per Rules mentioned in the Revised Store Purchase Manual.

The bidders should participate this tender through E-Tendering System. Tender cost and EMD should be submitted only through online. For more details Contact Ph.0471 2577088, 0471 2577188, 0471 257388, 0471 2515772.

**Sd/-  
PRINCIPAL**