## QUOTATION

Date:02.08.2016

## Ref. No. ED/HE(T)/2016/144

## Last date of submission:- 2pm of 5<sup>th</sup> September'2016 Name of Lab.:- Building Materials

SI. No.	Item	Model & Make	Rate per unit	
			in figure	in words
1,	Compressive Strength Machine: 40 Ton Mechanical type, with single Pressure gauge, Electrically operated Crushing of concrete cube, cement cube, brick, aggregate These are two/Four pillar type load frames. Two solid pillars are vertically fixed to a sturdy base and at other end is fixed across-head. The height of the cross head is also slightly adjustable. A lead screw passes through the center of cross-head. To the lower end of this lead screw is fixed upper platen with a spherical seat for self alignment. At the center of the base plate is fixed a jack, on the top of which the lower platen with the help of a centering pin is kept. The distance between the upper and platen is variable by means of the lead screw. A spacer block is also supplied with the load frame. This spacer block which can be fitted on the top of the jack and below the lower platen by means of centering pins helps reduce the distance between the two platens. The platens are well machined, polished and hardened. The lower platen has concentric grooves to centrally place the specimen. A dust cover for jack is supplied to prevent any dust going in the jack.			
2.	Vicat Needle Apparatus With Dashpot  AS PER IS: 5513: For determination of consistency of standard cement paste and initial and final setting times of cement. The equipment comprises the following:  i) A frame with a vertically movable rod having a cap at the top.  ii) Vicat mould in the form of frustum of a cone with internal diameter of 60 mm at the top, 70 mm at the bottom and a height of 40 mm.  iii) Glass base plate for the mould.  iv) Initial Setting Time Needle.  v) Final Setting Time Needle.  vi) Consistency plunger. Complete set in working condition.  Complete set in working condition.			
3.	Le Chatelier Mould, As Per IS: 5514-1969 Used for determination of soundness of cement, and class-A and class-B limes. The apparatus consists of the following:  i) One split cylinder 30 mm dia x 30 mm high made of spring brass with two indicator arms.  ii) Two glass plates.			

	iii) One lead weight approximately 100 gms.  Optional: WATERBATH: Water bath capable of containing immersed Le-Chatelier moulds with specimens and of raising their temperature from 27' deg +/- 2'deg C to boiling in 27 +/- 3 minutes. Made of double walled, Outer made of Aluminum / G.I. powder coated inside made of stainless steel. Gap between the wall filled by glass wool to avoid heat losses. Heating is by means of kettle type heating elements with self ejection device in case of dry running. The heater is easily replaceable. The bath can accommodate six Le-chatlier moulds at a time in the manner prescribed in IS specifications. Complete with three core wire and 15 Amp. Three pin top.  Steel Rule: 30 cm, Stain less steel	
4.	SLUMP TEST APPARATUS: IS: 1199, IS 7320*, Consists of a slump cone fitted with handles and foot pieces in position. Base plate in octagonal shape two clamps slide over the foot grips of a standard slump cone and hold it securely while fitting and rodding. A combination swivel carrying handle. Complete with graduated tamping rod 0-60 cms long and 16 mm dia with 0-30 cms scale graduation.	
5.	COMPACTION FACTOR APPARATUS: AS PER IS:1199*, Consists of two conical hoppers and a cylinder mounted on a rigid metal frame. The lower openings of the hoppers are fitted with hinged trap doors for release and during the fall of the material. Complete with trowel and tamping bar 0-60 cms long X 16mm dia.	
6.	Cube Mould: Made of cast iron split duly machined inside accurately complete with base plate as per IS 516-1959.  Size 70.7mm x 70.7mm x 70.7mm  Cube Mould: For the metric size cube moulds, the faces are machined flat to +/ -0.02mm accuracy and finished to within 0.2mm. All moulds are supplied complete with base plate. Size 150mm x 150mm x 150mm	
7.	HOT AIR OVEN: Size: 14"x14"x14", SS Chamber with digital temperature Indicator cum controller temp. upto 50 to 250°C	
8.	SPECIFIC GRAVITY AND WATER ABROSPTION OF AGGREGATES AS PER IS: 2386 (Part - III). This set is used for specific gravity, apparent specific gravity and water absorption of aggregates.  Specification: The outfit comprises of - 1 No. Semi-self indicating balance, capacity 5 kg, accuracy 0.5 gm, provision is made in this balance to suspend density basket under material pan. Balance is supplied with necessary set of weights. This balance is mounted on an angle iron frame stand. 1 No. Density  Basket. 1 No. Air tight container of capacity similar to that of density basket. 1 No. Water tight container to suspend	

	density basket. 1 No. G.I. Tray of area not less than 650cm sq. 2 Nos. Absorbent clothes 75cm x 45cm.	
9.	Measuring Wedge : Steel	
10.	SAND POURING CYLINDER APPARATUS: Sand Replacement Equipment (Sand Pouring Method) Conforming to specifications and tolerance in accordance to I.S. 2720 Part XXVIII consists of: a. Sand Pouring Cylinder 115 mm internal dia with conical funnel and shutter. b. Sand Pouring Cylinder 215 mm internal dia c. Calibrating Container, 100mm inner dia and 150 mm deep with flange 50 mm wide. d. Metal tray 300mm square x 40mm deep with a 100mm dia hole at the centre. e. Metal tray 300 mm square x 40 mm deep without hole. Glass plate 450 mm square x 9 mm thick.	
11.	DIGITAL WEIGHING BALANCE: Capacity : 1000gm, Accuracy : 0.01gm	

Dated signature & Seal of the Quotationer