




**ANNAMACHARYA UNIVERSITY**  
**CIVIL ENGINEERING DEPARTMENT**



**Name of the Lab:** Concrete Technology



**Name of the Lab in-charge:** Mr. B. Raghunatha Reddy

S.No.	Equipment Photo	Name of the Equipment	Specifications	Price
1.		Compression Testing Machine	<ul style="list-style-type: none"><li>• Capacity - 2000 kN</li><li>• Loading mode - Power-operated, continuous (no shock)</li><li>• Load indicator - pace rate display</li><li>• Make - Enkay</li></ul>	Rs. 1,42,500/-

2.		Flexure Testing Machine	<ul style="list-style-type: none"> <li>• Capacity – 100 kN</li> <li>• Type of Pumping – Manual</li> <li>• Loading capacity – 0 to 100 kN</li> <li>• Least Count – 0.5 kN</li> <li>• Type of Loading – Third Point Loading</li> <li>• Make – Enkay</li> </ul>	Rs. 1,00,000/-
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3.		<p>Water Permeability Test Equipment</p>	<ul style="list-style-type: none"> <li>• Cylindrical specimens, 150 mm diameter × 150 mm height.</li> <li>• air compressor with pressure tank for steady flow.</li> <li>• Graduated glass burettes (0–50 ml, least count 0.1 ml) for measuring water passage through specimens.</li> </ul>	<p>Rs. 65,000/-</p>
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4.	 <p>A red cylindrical pressure vessel with a black protective cage over the top, mounted on a concrete base. A blue sign above it reads 'WATER PENETRATION TEST'.</p>	Water Penetration Test Equipment	<ul style="list-style-type: none"> <li>• Pressure cell: 0–15 kg/cm<sup>2</sup></li> <li>• Sealing system: Rubber gaskets</li> <li>• Water supply: Stainless steel reservoir with inlet/outlet</li> <li>• Pressure gauge: 0–15 kg/cm<sup>2</sup>, least count 0.1 kg/cm<sup>2</sup></li> </ul>	Rs. 65,000/-
5.	 <p>A silver-colored metal device with a black handle and a blue label, lying on a wooden surface.</p>	Rebound Hammer	<ul style="list-style-type: none"> <li>• Impact energy:</li> <li>• Rebound scale: 10 to 100 (or 0–100) units.</li> <li>• Accuracy / reproducibility: <math>\pm 1 - 2</math> units.</li> <li>• Plunger: spring-loaded hammer mechanism</li> <li>• Housing: rugged casing, alignment guide, built-in scale.</li> </ul>	Rs. 16,740/-

6.		Blain's Apparatus	<ul style="list-style-type: none"> <li>• Two circular filter papers, one below and one above the cement bed, of diameter ~12.7 mm.</li> <li>• Rubber bulb for applying controlled air pressure</li> </ul>	Rs. 4,750/-
7.		RCPT Apparatus	<ul style="list-style-type: none"> <li>• No. of Cells: 8</li> <li>• Cylindrical discs 100 mm diameter × 50 mm thick</li> <li>• <math>60 \pm 0.1</math> V DC regulated power supply, ripple-free, with overcurrent protection.</li> </ul>	Rs. 1,36,660/-



8.			<div>Compaction Factor Test</div>	<div><div>Upper Hopper</div><div>Top diameter: 250 mm Bottom diameter: 125 mm Height: 275 mm.</div></div> <div><div>Lower Hopper</div><div>Top diameter: 225 mm Bottom diameter: 125 mm Height: 225 mm.</div></div> <div><div>Cylinder (Receiving Mould)</div><div>Diameter: 150 mm Height: 300 mm.</div></div>	Rs. 13,950/-

9.		Vee-Bee Consistometer	<ul style="list-style-type: none"> <li>• Slump cone</li> <li>• Height: 300 mm Top diameter: 100 mm Bottom diameter: 200 mm</li> <li>• Cylindrical Container</li> <li>• Internal diameter: 240 mm Height: 200 mm</li> <li>• Electric motor (0.5 HP) driving an eccentric shaft to produce vibration.</li> </ul>	Rs. 13950/-
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Vicat's Apparatus

- Plunger: dia. 10mm, length 50mm
- Initial setting needle: dia. 1.13mm, length 50mm
- Final setting time needle: 1.13 mm with annular collar
- Mould: frustum of cone 40 mm high upper dia. 70mm lower dia. 80mm

Rs. 3,225/-



11.		Weighing Machine	<ul style="list-style-type: none"> <li>• Platform-type or electronic digital weighing machine</li> <li>• Least count 50g</li> <li>• Large digital LCD indicator</li> <li>• 230 V <math>\pm</math> 10%, 50 Hz, single-phase AC or rechargeable battery backup</li> </ul>	Rs. 16,250/-
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12.		Accelerated Curing tank	<ul style="list-style-type: none"> <li>• 12-cube capacity.</li> <li>• Immersion heaters (stainless steel sheathed), total load 2 kW</li> <li>• Digital temperature controller cum indicator with thermostat and sensor</li> </ul>	Rs. 75,000/-
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