



**55894** Experimental Set Up has been designed specifically for measuring the modulus of rigidity of the material of a given rod by static method using vertical pattern of Barton's apparatus. Practical experience on this set up carries great educative value for Science and Engineering Students.

### Object

To determine the modulus of rigidity for the material of a given rod (Brass & Steel) by static method using vertical pattern of Barton's apparatus.

### Features

The complete Experimental Set-up consists of the followings:

#### 1. TORSION APPARATUS(VERTICAL PATTERN) OR BARTON'S APPARATUS:

The apparatus consists of two long metal mounting rods located vertically on a T-shaped assembly and are jointed at the top through another square metal rod. Three adjustable angle measure attachments are located vertically along the lengths of the rods. The bottom T-shaped assembly has a circular drum on top to which is connected the weight pan on its either side through a lightweight cord. Chuck is provided at the top and bottom with tightening screws to firmly hold the experimental rod. Complete assembly mounted on a heavy cast metal tripod base with leveling screws. Includes two experimental rods - one of brass and another of steel.

**2. Slotted Weights :** 1/2 kilogram. (1/2kg x 12 = total weight 6 kg).

**3. Screw Gauge :** 1 Nos.

**4. Vernier Calipers. :** 1 Nos.

**5. One Meter Scale (wooden). :** 1 Nos.

Note: Specifications are subject to change.