DETERMINATION OF DENSITY OF IRREGULAR SHAPED BODY

OBJECTIVE: To find out density of an irregular shaped body.

APPARATUS REQUIRED: Measuring cylinder, irregular shaped body, thread or string for tying up the body, measuring scale, beam balance

PROCEDURE:

At first, we measure mass of an irregular shaped body on beam balance, say m.

It is to be tied up with a string and put into the measuring cylinder which is filled with water upto a known volume, say V_1.

After putting into the water, the level of water will rise. Let V_2 be the new volume of water.

Hence, volume occupied by the irregular shaped body will be $V_2 - V_1$

Therefore, density $= \frac{\text{mass}}{\text{volume}}$

$= \frac{m}{V_2 - V_1}$