

## Data for Laboratory 2: Applications of Static Equilibrium to Models

\*\* You require a ruler, protractor, calculator & graph paper (provided in manual) for this lab. \*\*

All hooked, slotted or otherwise ‘pre-determined’ lab masses are assumed to be good to the nearest gram, e.g. 200. grams. Mass measurements made using the *triple beam balance* are good to the nearest *tenth* of a gram, e.g. 200.0 g.

**\*\* Please use the data below for this lab rather than any provided in the lab manual. \*\***

$$m_{load\ on\ hand} = 700. \text{ g}$$

$$\text{Overall length } L \text{ of the stretched spring: } L = L_f - L_i = 20.1 - 10.0 = ? \text{ cm}$$

$$\text{Vertical size } \Delta y \text{ of the stretched spring: } \Delta y = y_f - y_i = 37.2 - 30.0 = ? \text{ cm}$$

$$m_{arm+hand} = 403.1 \text{ g}$$

$$m_{stretch} = 5550. \text{ g} + 1.000 \text{ kg (hanger)}$$