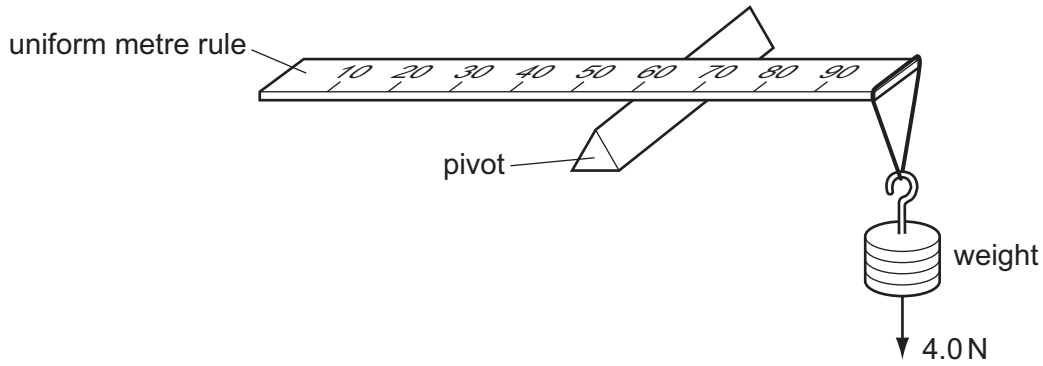
15 A uniform metre rule of weight 2.0 N is pivoted at the 60 cm mark. A 4.0 N weight is suspended from one end, causing the rule to rotate about the pivot.



At the instant when the rule is horizontal, what is the resultant turning moment about the pivot?

A zero **B** 1.4 N m **C** 1.6 N m **D** 1.8 N m

16 What is the internal energy of a system?

A the amount of heat supplied to the system

B the random energy of the atoms of the system

C the total kinetic energy of the system

D the total potential energy of the system

Space for working