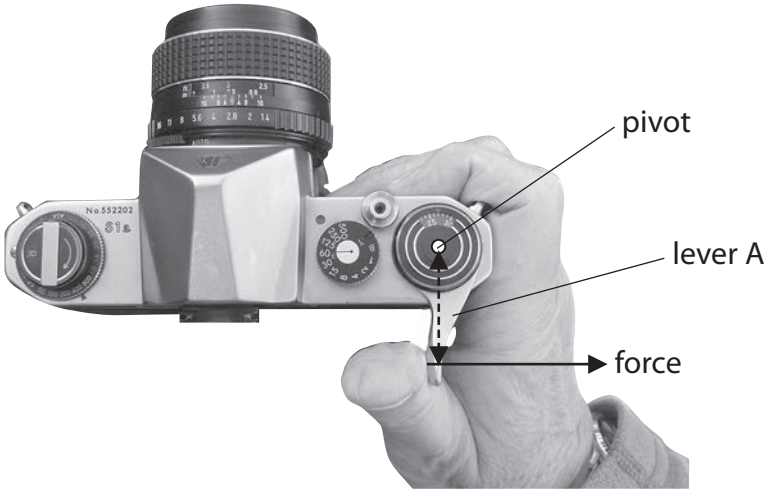
5 Photograph **C** shows a student using an old camera that uses film.



Photograph **C**

(a) The film is pulled through the camera using lever A.

The student pushes on lever A with a force of 7.0 N.

The force is applied 0.04 m from the pivot.

(i) State the equation linking moment, force and distance.

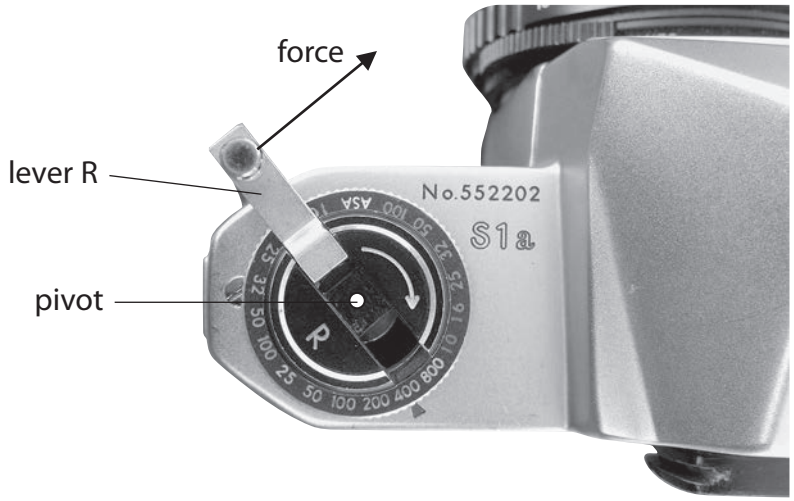
(1)

(ii) Calculate the moment of the force that turns lever A and give the unit.

(3)

Moment = ... unit .....

(b) When all the film has been used, it is pulled back through the camera using lever R.



Photograph **D**

The force acting on lever R is only 0.02 m from its pivot.

Explain why the minimum force needed to turn lever R is likely to be more than 7 N.

(2)

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(Total for Question 5 = 6 marks)