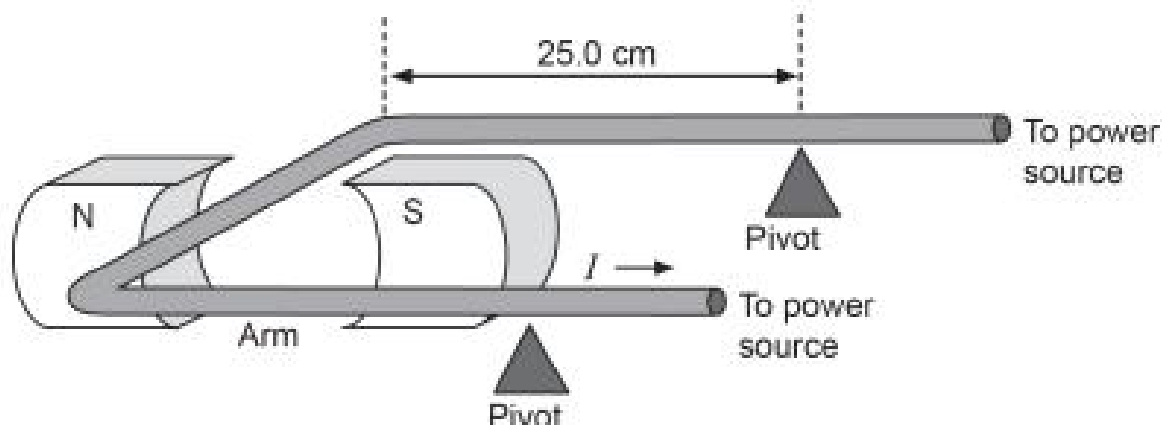


**Question 10****(4 marks)**

A wire carrying a current of  $1.68\text{ A}$  has  $8.75 \times 10^{-2}\text{ m}$  of its length passed through a  $4.44 \times 10^{-2}\text{ T}$  magnetic field at right angles to it as shown below. The circuit is part of an apparatus that is able to measure the torque produced by the current passing through the magnetic field.



Given that the arm has a length of  $25.0\text{ cm}$  from the wire in the field to the pivot point, calculate the torque produced. Include direction with your answer.

Answer \_\_\_\_\_ N m

Direction \_\_\_\_\_