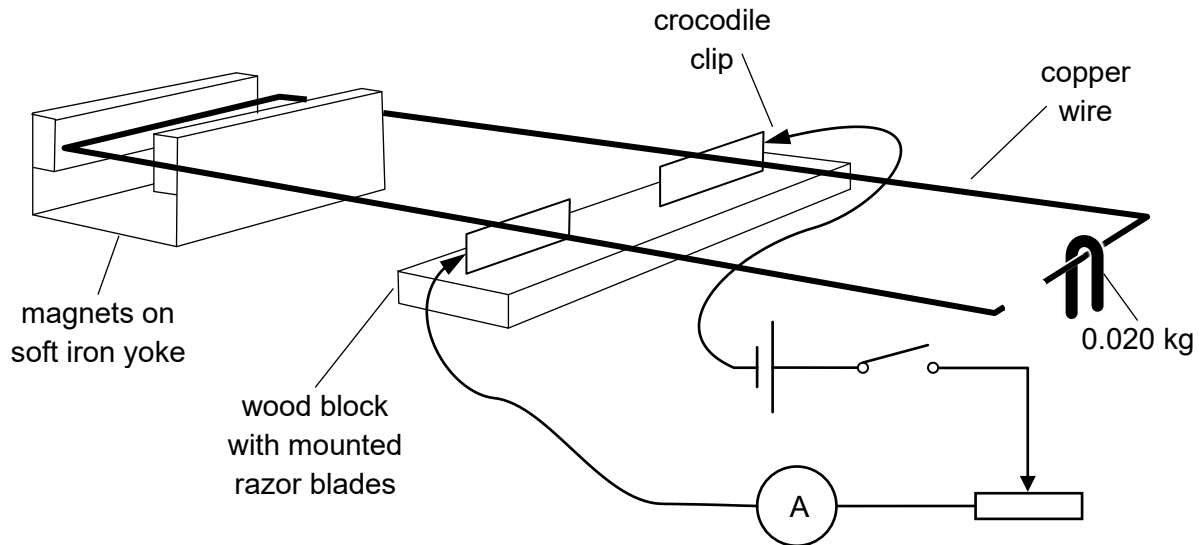**25** The diagram shows a current balance used to measure the magnetic flux density of a magnet.

The insulation is 0.30 m from the razor blades while the other end of the wire, which is 0.20 m long, is 0.25 m from the blades. A 0.020 kg mass is placed at the right end in order to balance the wire when the switch is closed. The ammeter registers a reading of 1.6 A.

What is the flux density of the magnetic field produced by the magnet?

A 0.12 T **B** 0.51 T **C** 0.61 T **D** 0.74 T