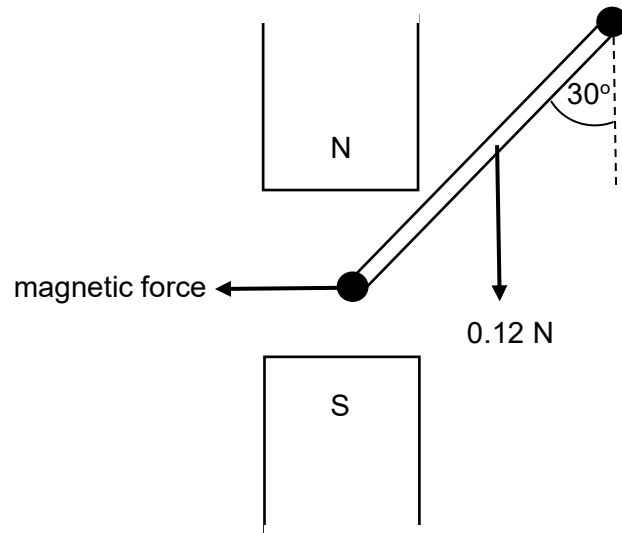


- 23** A rigid square coil of side 60 mm has 50 turns. It hangs vertically so that it can rotate freely about one side.



When a current of 0.40 A passes through the coil, it hangs at an angle  $30^\circ$  to the vertical with its lowest side in the vertical magnetic field of a magnet. The weight of the coil is 0.12 N.

What is the magnetic flux density of the field between the magnets?

- A** 0.029 T                      **B** 0.058 T                      **C** 0.087 T                      **D** 1.4 T

