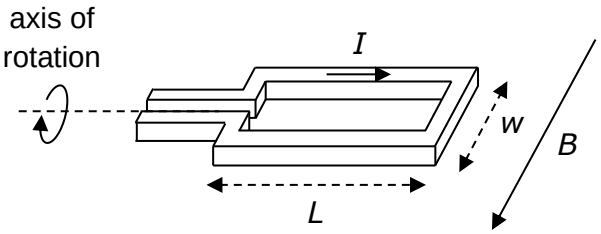
24 A rectangular coil of length *L* and width *w* carries a current *I.* It is placed completely in a uniform magnetic field of flux density *B* and the direction of the field is parallel to the width *w*, as shown below. The coil rotates about a horizontal axis.



What is the *maximum* torque experienced by the coil?

A $\frac{1}{2}BILw$ **B** $BILw$ **C** $2BILw$ **D** $4BILw$