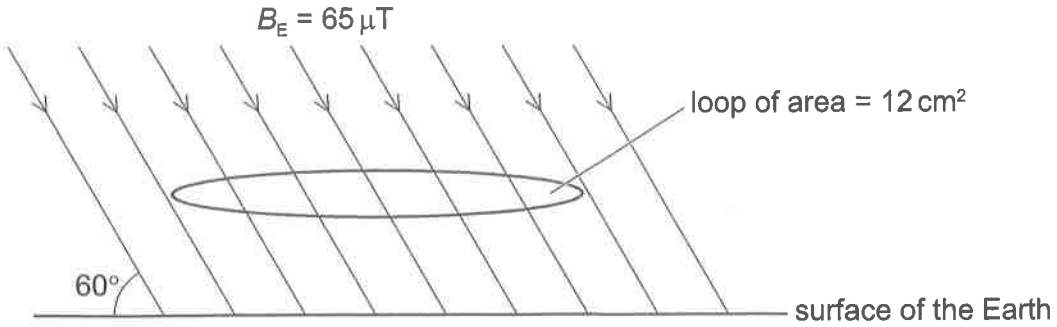
25 A flat, circular loop of wire, enclosing an area of $12\,cm^2$, is held horizontally above the Earth's surface. The Earth's magnetic flux density B_E is $65\,\mu T$ in a direction making an angle of 60° with the horizontal.



What is the magnetic flux through the loop of wire?

A $3.9 \times 10^{-8}\,Wb$

B $6.8 \times 10^{-8}\,Wb$

C $3.9 \times 10^{-4}\,Wb$

D $6.8 \times 10^{-4}\,Wb$