

The induced emf = $A \cdot dB/dt = \pi \cdot (0.06\text{m})^2 \cdot 6.5 \times 10^{-3} \text{ T/s} = 7.34 \times 10^{-5} \text{ V}$

Now $E \cdot L = \text{emf}$ where $L = 2\pi r$

So E at a distance r from the solenoid is $7.34 \times 10^{-5} \text{ V} / (2\pi \cdot r)$

$$E(8.2 \text{ cm}) = \frac{7.34 \times 10^{-5} \text{ V}}{2\pi \cdot 8.2 \cdot 10^{-2} \text{ m}} = 1.42 \cdot 10^{-4} \frac{\text{V}}{\text{m}}$$