Prob3141: A solenoid of radius $\mathrm{r} w / \mathrm{n}$ turns per unit length carries a current $\mathrm{I}=\mathrm{I}_{0} \cos$ $\omega \mathrm{t}$. What are the magnitude and direction of the induced electric field just outside the solenoid?

Ans: Because of circular symmetry and field depends only on r. and also assume all field is inside solenoid.
or

