PHYS 201
Quiz # 3 - Term 061

Name _____ ID # _____

1. At what rate must the potential difference between the plates of a parallel-plate capacitor with a 2.0 μF capacitance be changed to produce a displacement current of 1.5 A?

2. An electron is placed in a magnetic field $\vec{B}$ that is directed along a z axis. The energy difference between parallel and anti-parallel alignments of the z component of the electron's spin magnetic moment with $\vec{B}$ is 6.0 x 10^{-25} J. what is the magnitude of $\vec{B}$ (μ_B=9.27 x 10^{-24} $\frac{J}{T}$)