Helpful constants for you:

c = $3\ 10^{8}$ m/s
e = $1.6\ 10^{-19}$ coulombs
h = $6.63\ 10^{-34}$ J-s
m = $9.1\ 10^{-31}$ kg
k_B = $1.38\ 10^{-23}$ J/K
k_BT/e = 0.029 V at room temperature

Schroedinger Equation:

$$i\hbar\frac{\partial}{\partial t}\Psi(\vec{r},t) = -\frac{\hbar^2}{2m}\vec{\nabla}^2\Psi(\vec{r},t) = -\frac{\hbar^2}{2m}\left(\frac{\partial^2}{\partial x^2}+\frac{\partial^2}{\partial y^2}+\frac{\partial^2}{\partial z^2}\right)\Psi(\vec{r},t)$$

Drift-Diffussion:

$$\frac{\partial \delta n}{\partial t} = D_n\frac{\partial^2 \delta n}{\partial x^2} + \mu_n E\frac{\partial(\delta n)}{\partial x} - \frac{\delta n}{\tau} + G_n$$

Fermi-Dirac:

$$P(E) = \frac{1}{e^{(E-E_f)/kT}+1}$$